CyberPower

PowerPanel Business Edition® (PPBE) on VMware vSphere ESXi Servers

Installation Guide

--- for PPBE v3.3 or above

Rev. 2

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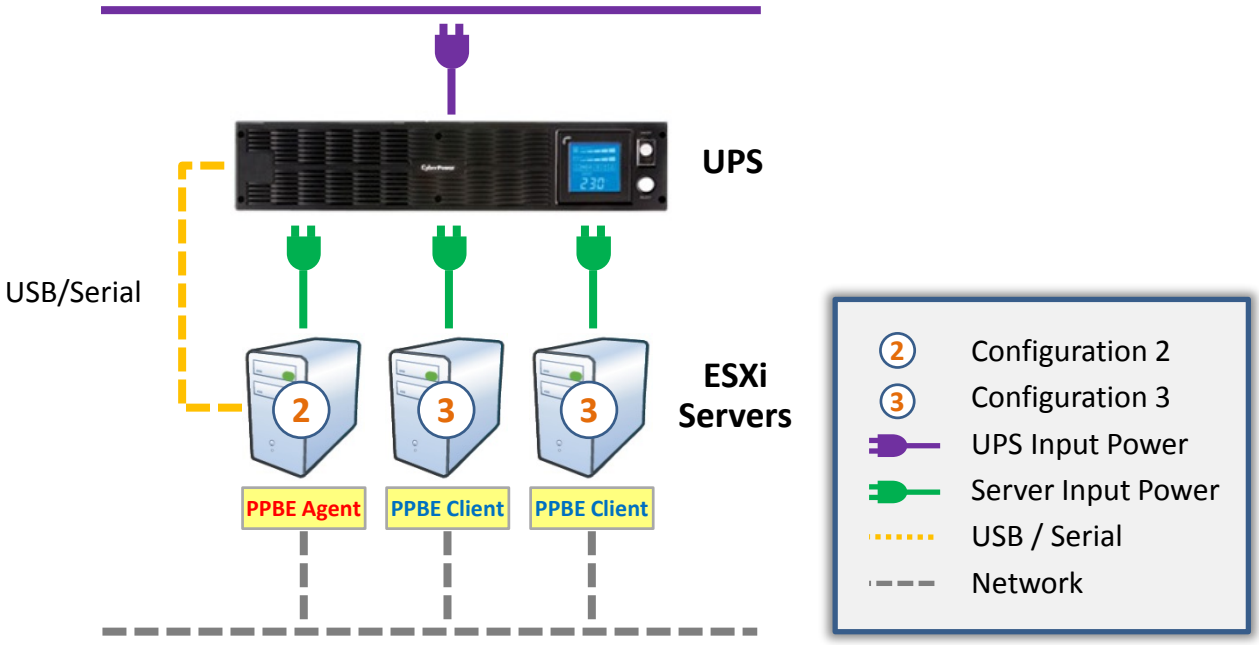
1. APPLICABLE SCENARIOS

Scenario 1 – UPS without RMCARD

Scenario 1 is recommended if:

- You have a single UPS with less than 3 ESXi servers.
- Your UPS does **NOT** have an RMCARD installed.
- You do not need central monitoring so you won't install PPBE Center.



PPBE Virtual Appliance (VA) Agent needs to be installed in only one of the ESXi servers, the rest of the ESXi servers need to have PPBE Virtual Appliance (VA) Client installed.

Please refer to Configuration 2 and 3 for the installation and configuration details of PPBE VA Agent and Client.

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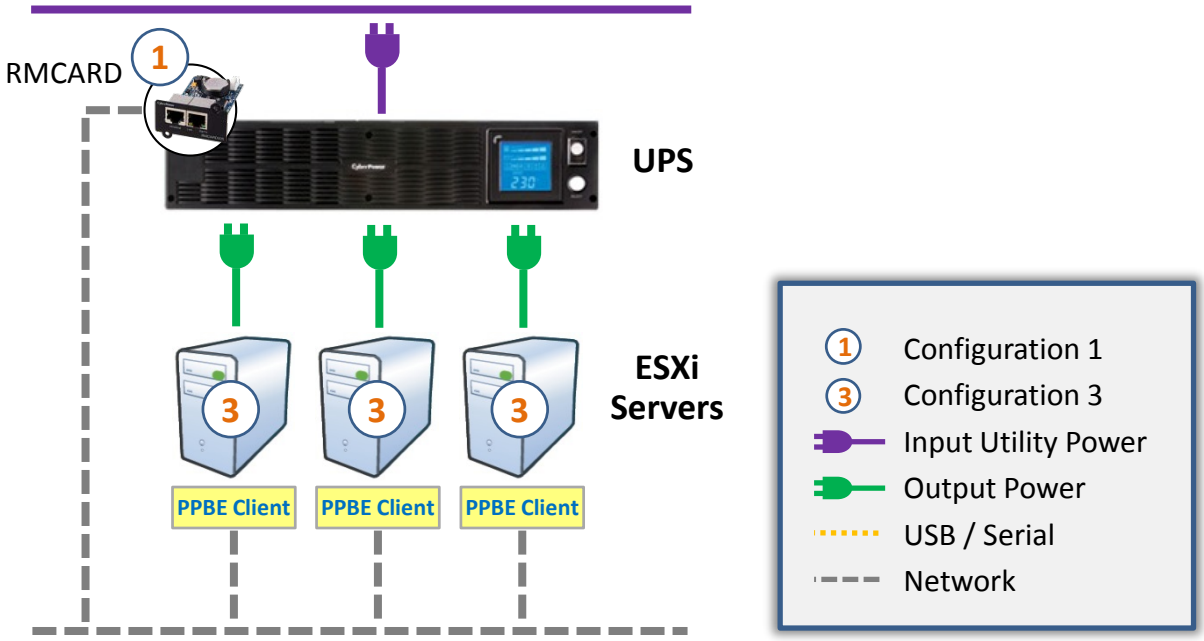
1. APPLICABLE SCENARIOS

Scenario 2 – UPS with RMCARD

Scenario 2 is recommended if:

- You have a single UPS with less than 3 ESXi servers.
- Your UPS has an RMCARD installed.
- You do not need central monitoring so you won't install PPBE Center.



All ESXi servers need to have PPBE VA Client installed.

Please refer to Configuration 1 and 3 for the installation and configuration details of the RMCARD and PPBE VA Client.

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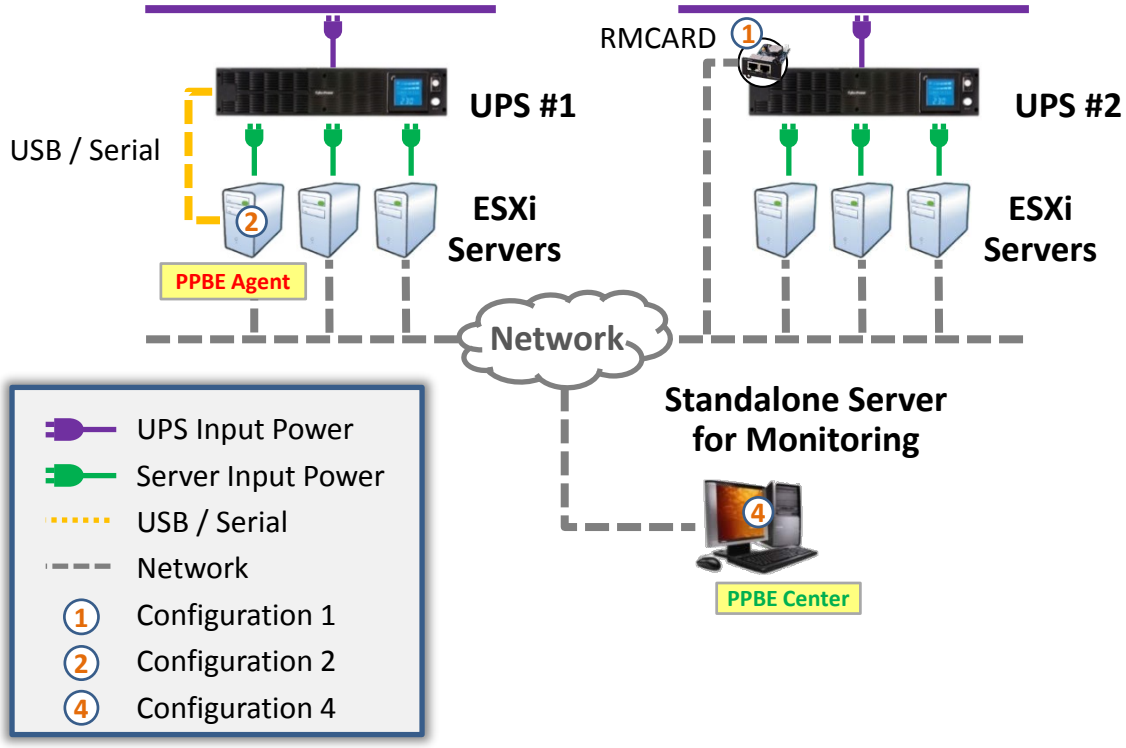
1. APPLICABLE SCENARIOS

Scenario 3 – UPS (with/without RMCARD) + PPBE Center

Scenario 3 is recommended if:

- You have multiple UPSs or more than 3 ESXi servers.
- You do NOT have VMware vCenter server.
- You will install PPBE Center for central monitoring (RECOMMENDED).



- With PPBE Center, **if UPS is without RMCARD** like UPS #1, only one ESXi server needs to have PPBE VA Agent installed, and other ESXi servers DO NOT need to have PPBE VA Client installed.
- With PPBE Center, **if UPS is with RMCARD** like UPS #2, NONE of the ESXi servers need to have PPBE VA Client installed.

Please refer to Configuration 1, 2, and 4 for the installation and configuration details of the RMCARD, PPBE VA Agent, and PPBE Center.

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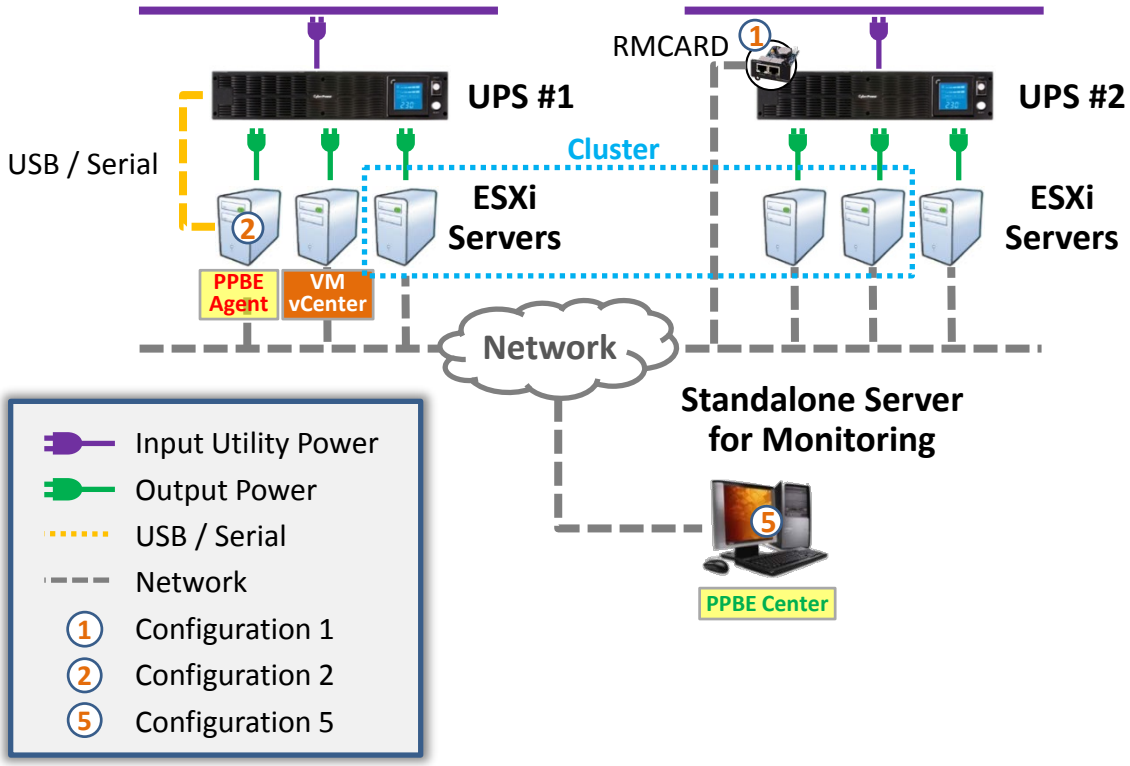
1. APPLICABLE SCENARIOS

Scenario 4 – UPS (with/without RMCARD) + PPBE Center + VMware vCenter

Scenario 4 is recommended if:

- You have multiple UPSs or more than 3 ESXi servers.
- You have VMware vCenter server.
- You will/may have a cluster of ESXi hosts.



- With PPBE Center, **if UPS is without RMCARD** like UPS #1, only one ESXi server needs to have PPBE VA Agent installed, and other ESXi servers DO NOT need to have PPBE VA Client installed.

- With PPBE Center, **if UPS is with RMCARD** like UPS #2, NONE of the ESXi servers need to have PPBE VA Client installed.

Please refer to Configuration 1, 2, and 5 for the installation and configuration details of the RMCARD, PPBE VA Agent, and PPBE Center.

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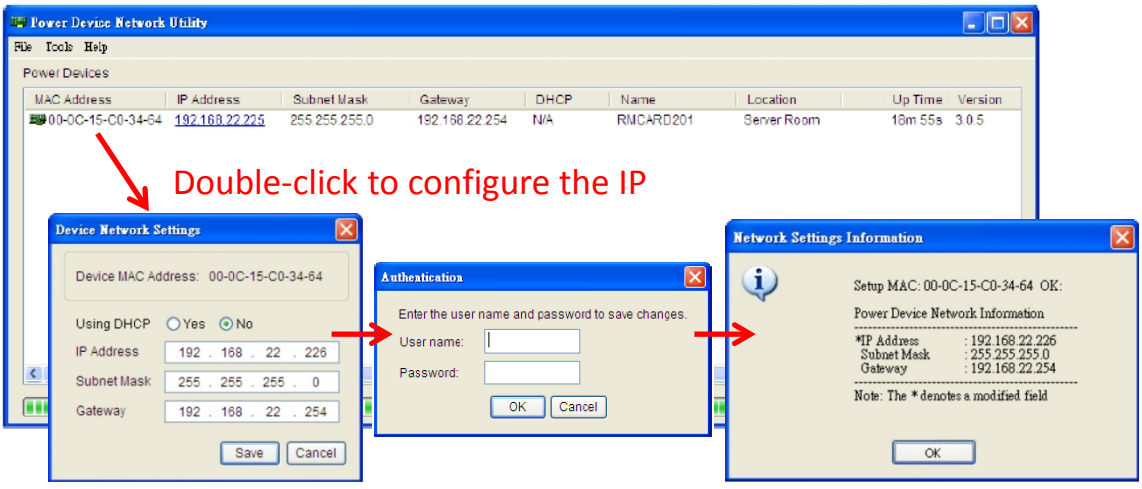
2. CONFIGURATION 1

Install RMCARD on UPS

1. Download “Power Device Network Utility” tool from CyberPower official website and use it to discover the RMCARD on your network. Assign a static IP address if necessary.

You will need to enter a username and password for authentication when you modify the IP address. Default Username/Password for authentication is **cyber/cyber**.



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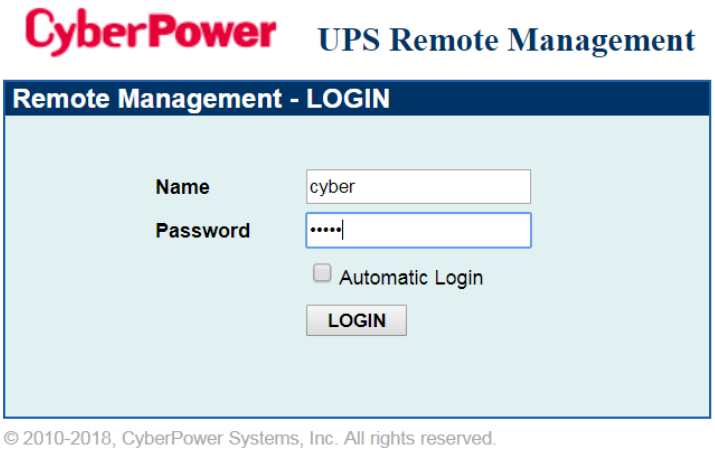
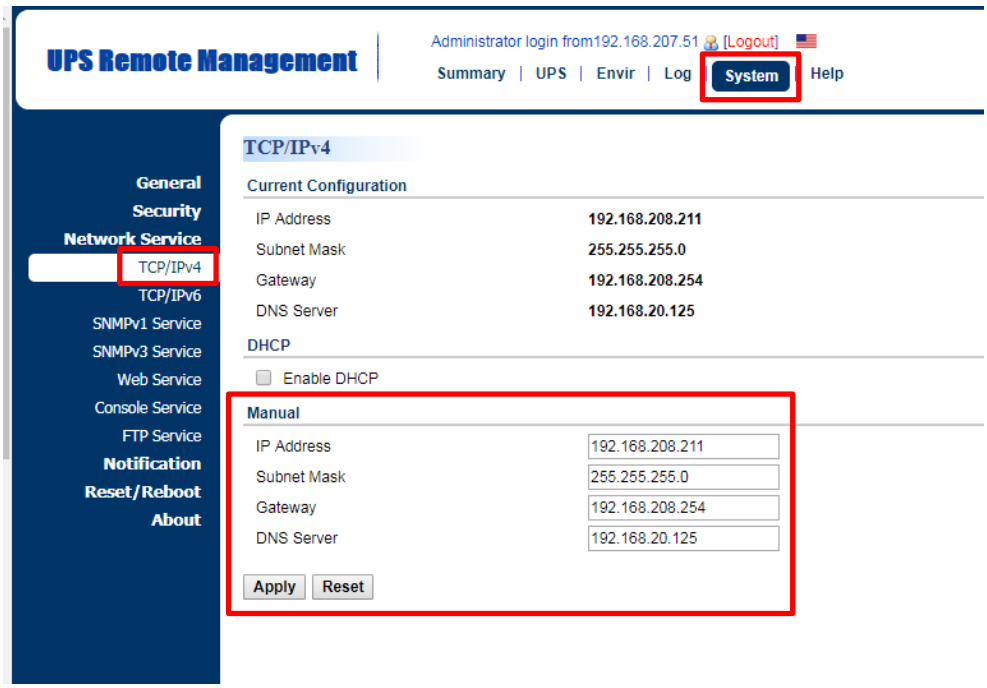
2. CONFIGURATION 1

2. Log on to the web interface of the RMCARD by directing your web browser to its IP address from step 1. Default login Username/Password is **cyber**/**cyber**.



3. You can check if your new IP address is correct in web interface.
Go to **System** → **TCP/IPv4** → **Manual** section.
You can modify or re-assign another IP address if necessary.



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2. CONFIGURATION 1

4. If the ESXi host with PPBE VA Client installed (and powered by this UPS) has been setup correctly, it will be displayed on the **UPS → PowerPanel List** screen.

After all installation and configuration are done, you can return to check if all ESXi hosts with PPBE VA Client are displayed on the list.

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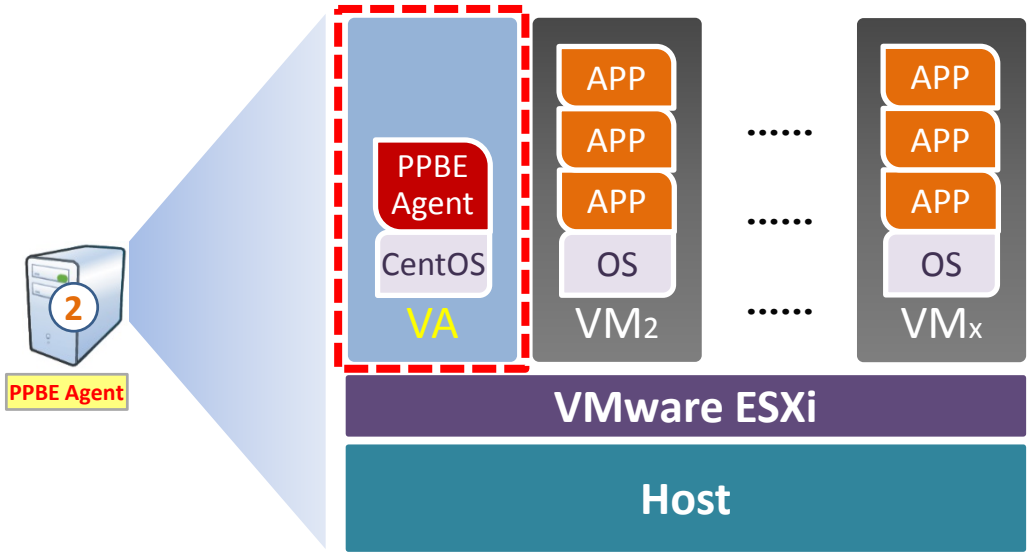
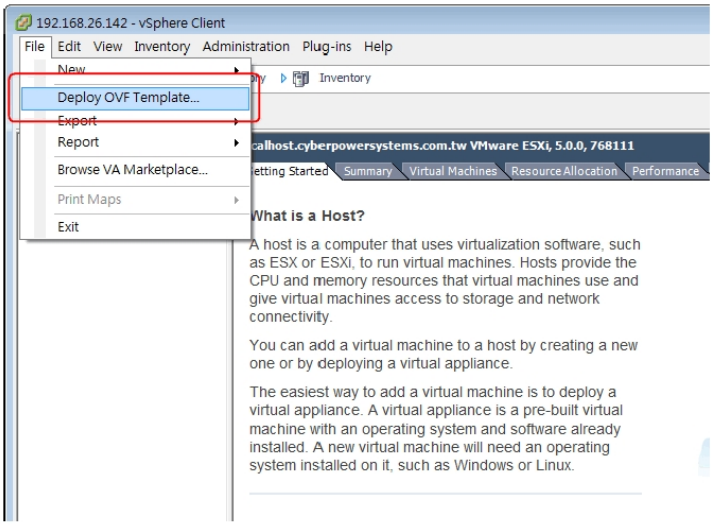
2. CONFIGURATION 2

Install PPBE VA Agent



1. Download the latest version of **PPBE Agent Virtual Appliance** from CyberPower official website.
2. Launch the vShpere Client. Open the **Deploy OVF Template** window from **File** → **Deploy OVF Template…**.


192.168.26.142 - vSphere Client
File Edit View Inventory Administration Plug-ins Help
New
Deploy OVF Template...
Export
Report
Browse VA Marketplace...
Print Maps
Exit
Inventory
Summary
Virtual Machines
Resource Allocation
Performance
What is a Host?
A host is a computer that uses virtualization software, such as ESX or ESXi, to run virtual machines. Hosts provide the CPU and memory resources that virtual machines use and give virtual machines access to storage and network connectivity.
You can add a virtual machine to a host by creating a new one or by deploying a virtual appliance.
The easiest way to add a virtual machine is to deploy a virtual appliance. A virtual appliance is a pre-built virtual machine with an operating system and software already installed. A new virtual machine will need an operating system installed on it, such as Windows or Linux.

Note: *If your VMware ESXi is v6.5 or above, please use* ***vSphere Web Client*** *because vSphere Client is not supported.*

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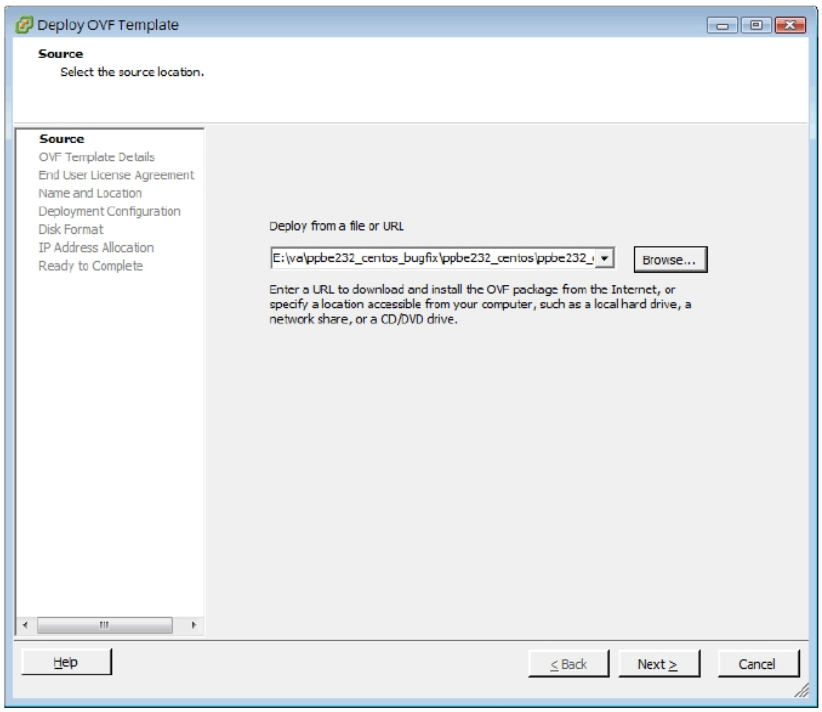
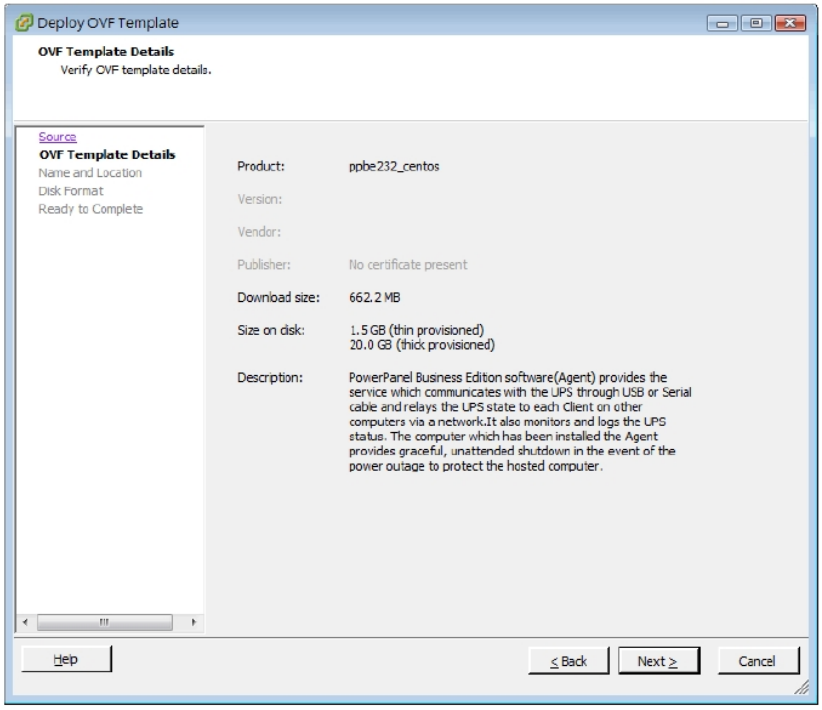
2. CONFIGURATION 2

3. Click **Browse** to import the **ppbeXXX centos.ovf** extracted from the downloaded zip file. Click **Next** to start the deployment task.


Deploy OVF Template
Source
Select the source location.
Source
OVF Template Details
End User License Agreement
Name and Location
Deployment Configuration
Disk Format
IP Address Allocation
Ready to Complete
Deploy from a file or URL
E:\va\ppbe232_centos_bugfix\ppbe232_centos\ppbe232_
Browse...
Enter a URL to download and install the OVF package from the Internet, or specify a location accessible from your computer, such as a local hard drive, a network share, or a CD/DVD drive.
Help
< Back
Next >
Cancel

4. The OVF Template Details are displayed. Click **Next** to continue.


Deploy OVF Template
OVF Template Details
Verify OVF template details.
Source
OVF Template Details
Name and Location
Disk Format
Ready to Complete
Product: ppbe232_centos
Version:
Vendor:
Publisher: No certificate present
Download size: 662.2 MB
Size on disk: 1.5 GB (thin provisioned)
20.0 GB (thick provisioned)
Description: PowerPanel Business Editon software(Agent) provides the service which communicates with the UPS through USB or Serial cable and relays the UPS state to each Client on other computers via a network.It also monitors and logs the UPS status. The computer which has been installed the Agent provides graceful, unattended shutdown in the event of the power outage to protect the hosted computer.
Help
< Back
Next >
Cancel

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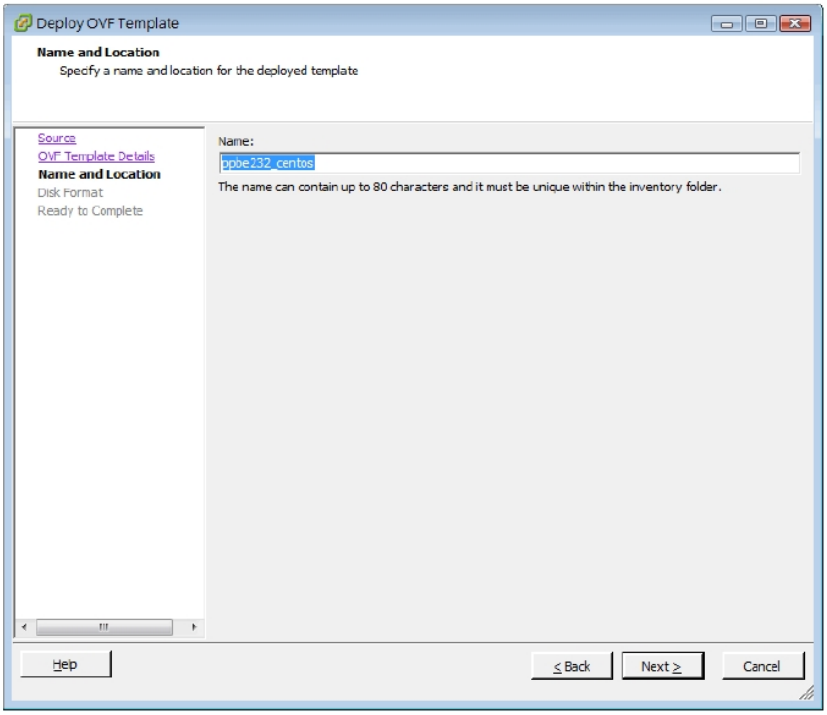
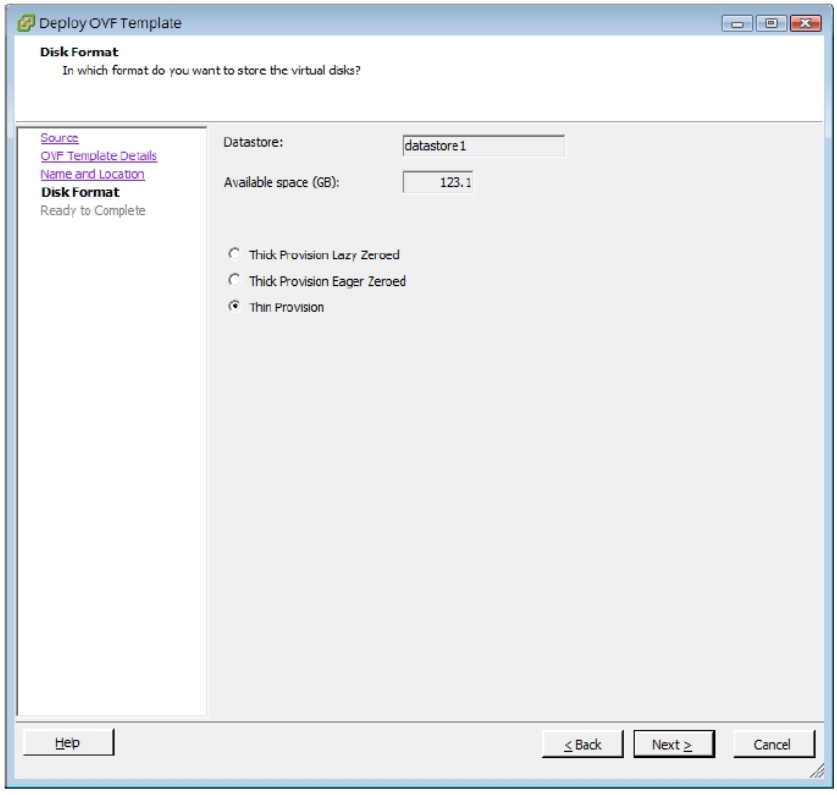
2. CONFIGURATION 2

5. Enter a name for the deployed PPBE virtual appliance. This name should be unique within the inventory. Click **Next** to continue.



6. Select the virtual disk format for the PPBE virtual appliance. The default option is **Thin Provision**. Click **Next** to continue.



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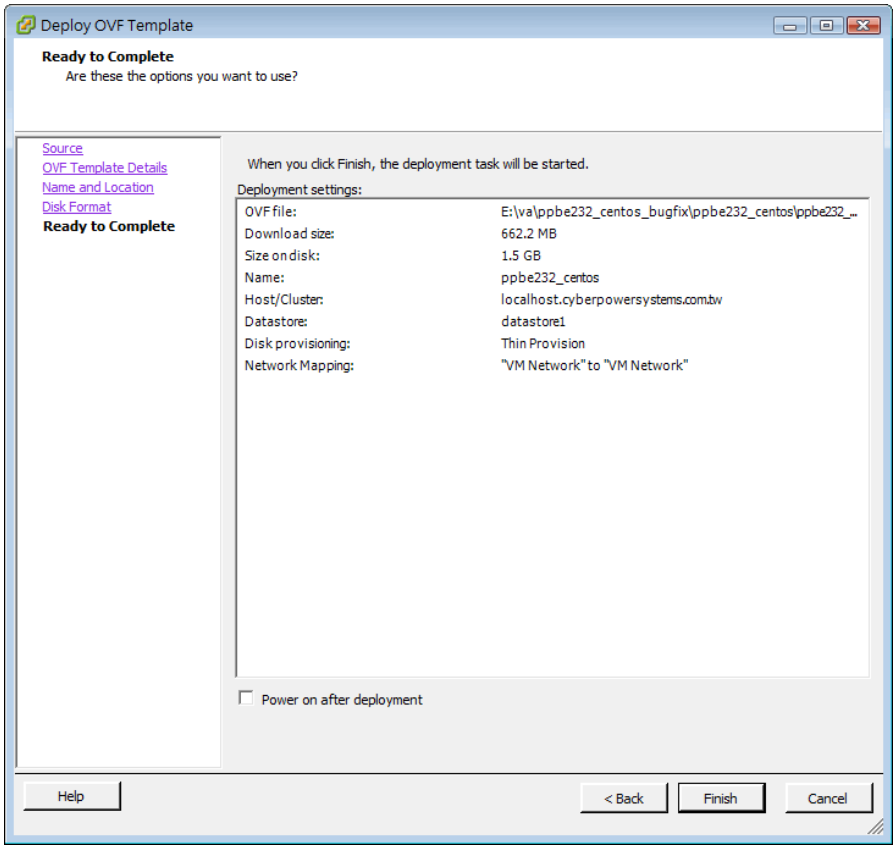
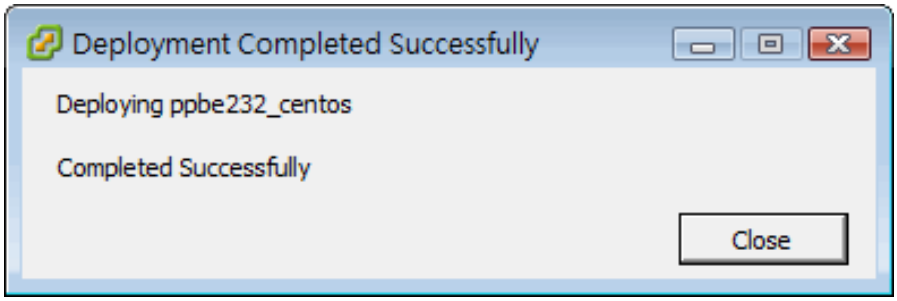
2. CONFIGURATION 2

7. The deployment details will be displayed. Click **Finish** to start the deployment task.



8. After the deployment task is completed, the PPBE virtual appliance will be added into the inventory.



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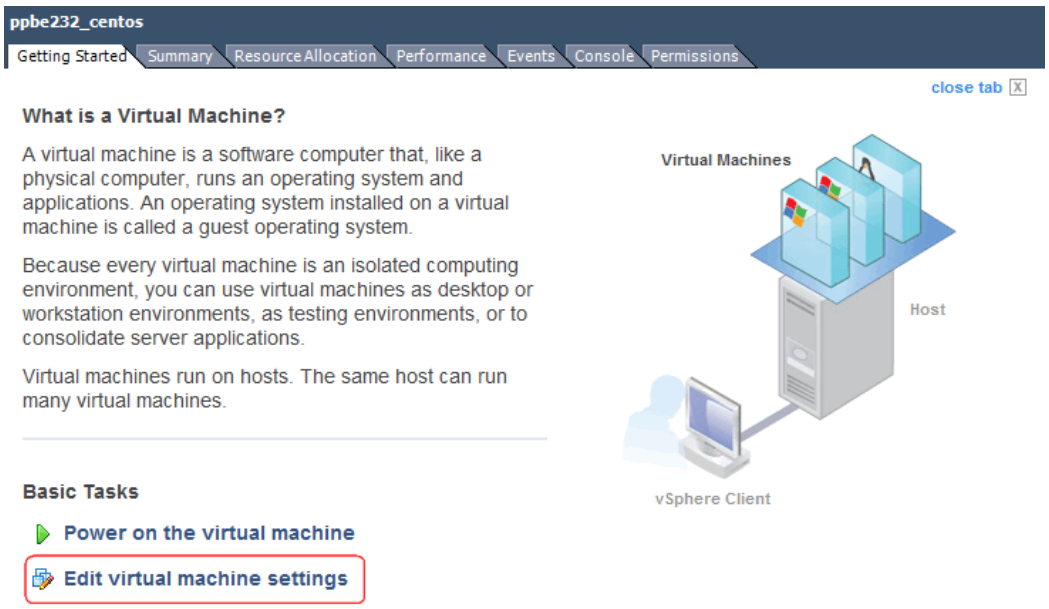
2. CONFIGURATION 2

9. Ensure the USB or serial port connection between the ESXi host and UPS is properly connected. The PPBE VA Agent will not monitor the UPS status if the communication is lost.

If PPBE VA Agent is installed on a virtual machine, then the USB or serial port will need to be manually assigned to the virtual machine. To do this, please follow these steps:.

9-1. Click **Edit virtual machine settings** of the virtual machine. If the USB controller is available, go to step 9-6 to add a new USB device.


ppbe232_centos
Getting Started
Summary
Resource Allocation
Performance
Events
Console
Permissions
close tab
What is a Virtual Machine?
A virtual machine is a software computer that, like a physical computer, runs an operating system and applications. An operating system installed on a virtual machine is called a guest operating system.
Because every virtual machine is an isolated computing environment, you can use virtual machines as desktop or workstation environments, as testing environments, or to consolidate server applications.
Virtual machines run on hosts. The same host can run many virtual machines.
Virtual Machines
Host
vSphere Client
Basic Tasks
Power on the virtual machine
Edit virtual machine settings

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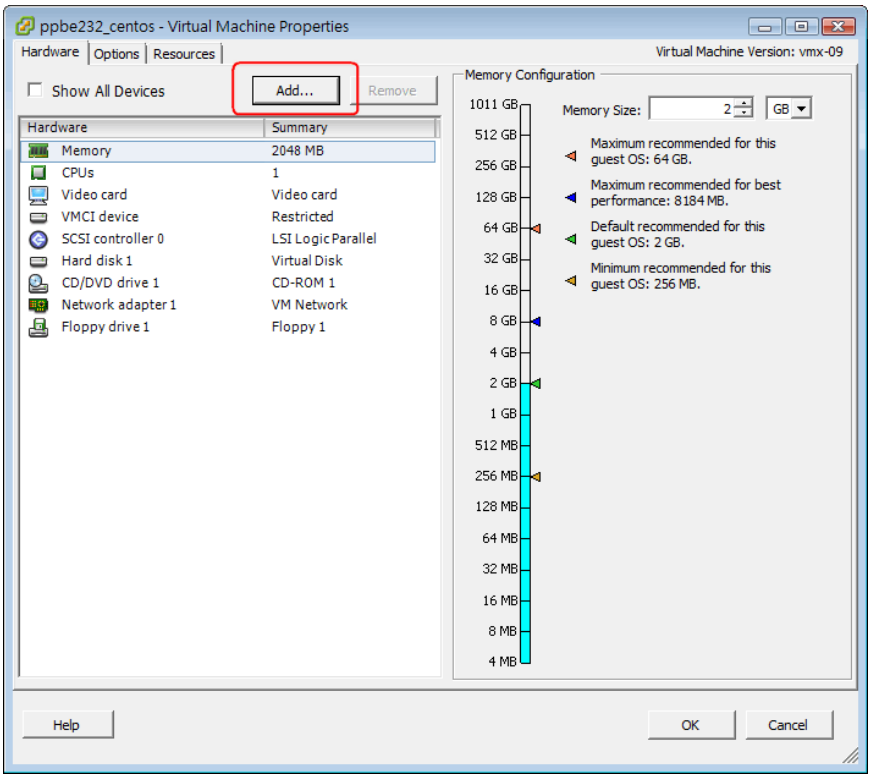
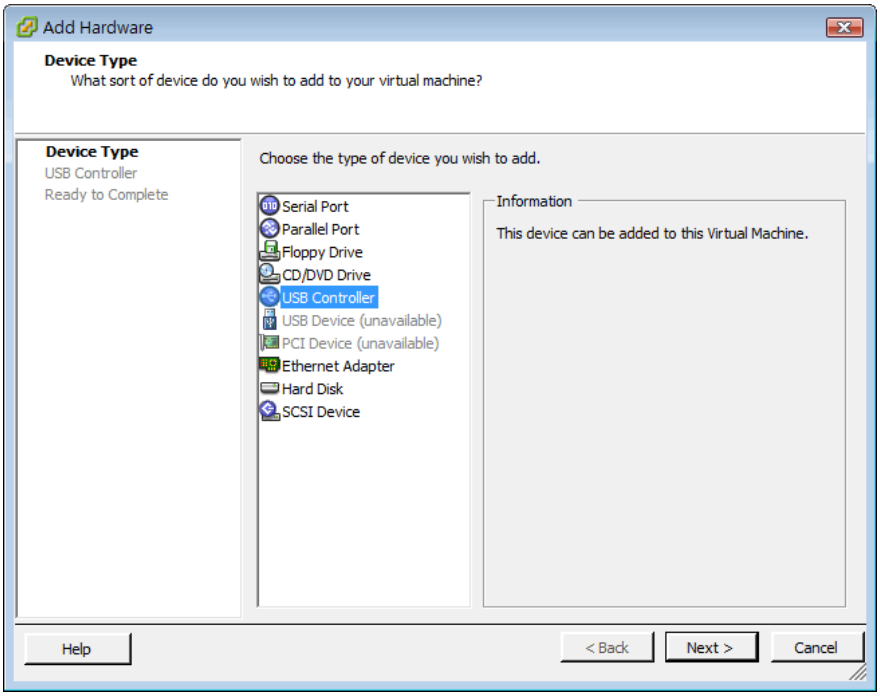
2. CONFIGURATION 2

9-2. Click **Add** to add a new USB controller.



9-3. Select **USB Controller** from the list and click **Next**.



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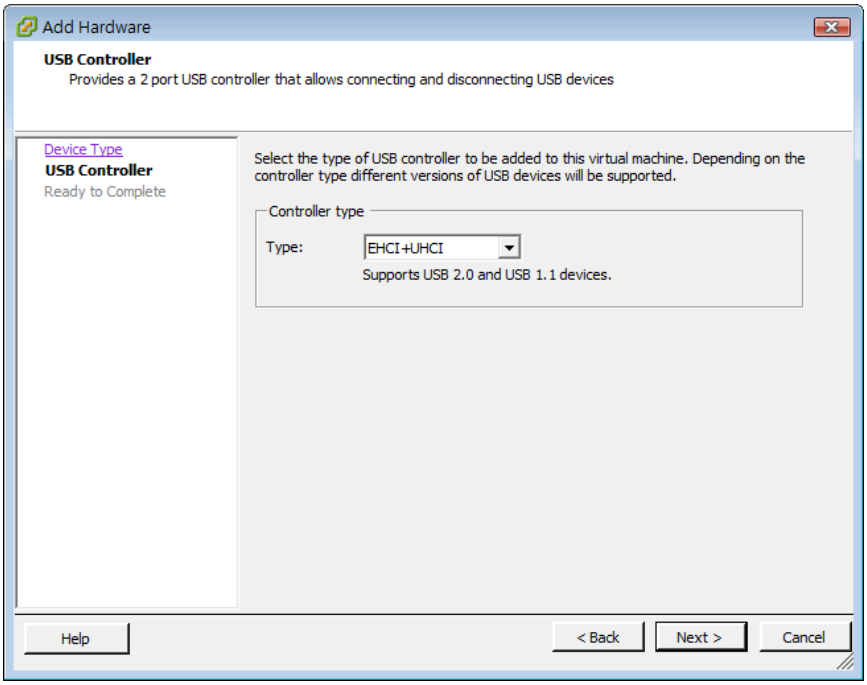
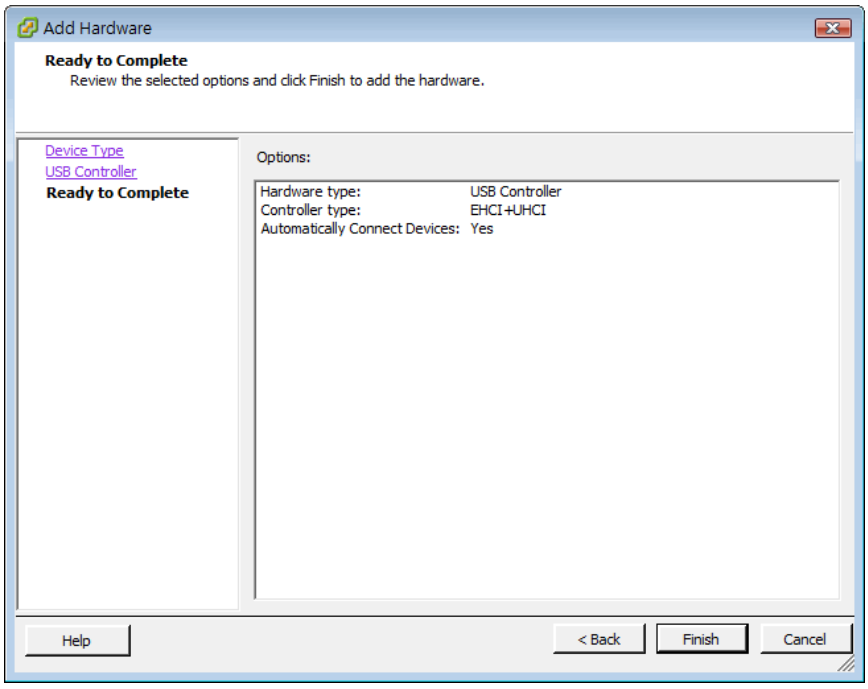
2. CONFIGURATION 2

9-4. Select USB Controller Type and click **Next**.


Add Hardware
USB Controller
Provides a 2 port USB controller that allows connecting and disconnecting USB devices
Device Type
USB Controller
Ready to Complete
Select the type of USB controller to be added to this virtual machine. Depending on the controller type different versions of USB devices will be supported.
Controller type
Type:
EHCI+UHCI
Supports USB 2.0 and USB 1.1 devices.
Help
< Back
Next >
Cancel

9-5. This will add a USB controller. Click **Finish** to complete the process.



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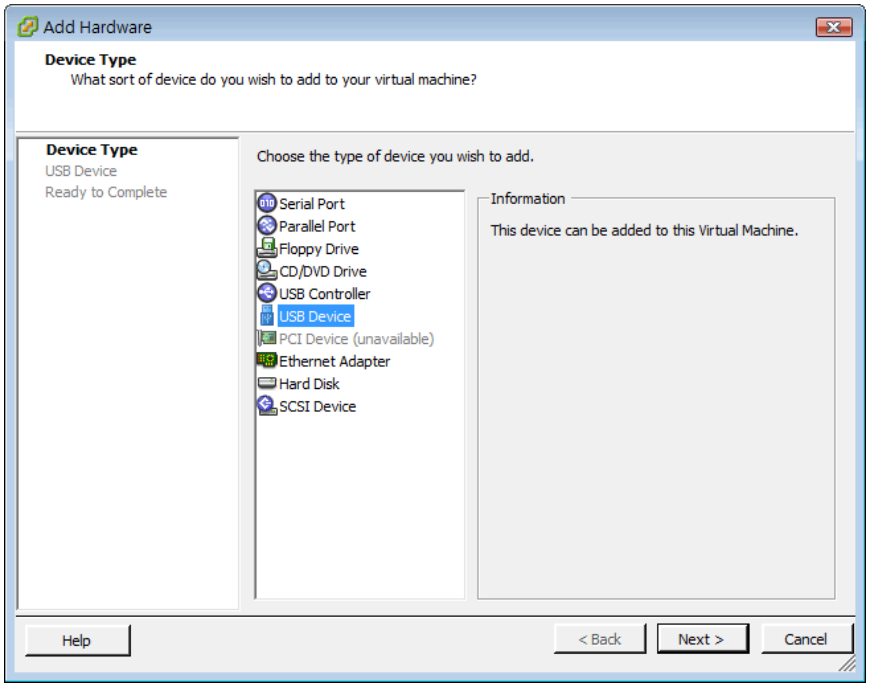
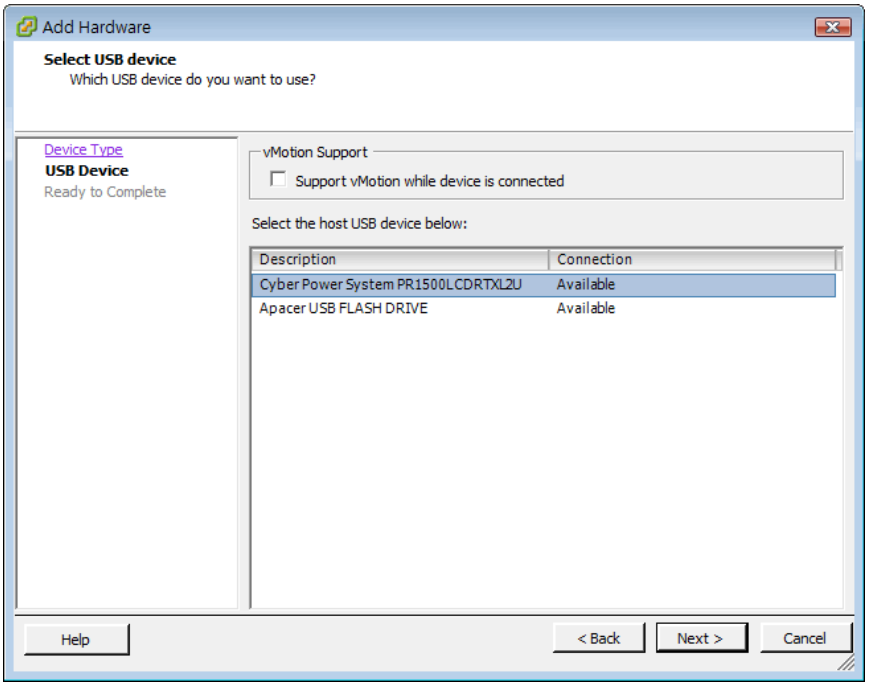
2. CONFIGURATION 2

9-6. Select **USB Device** and click **Next**.



9-7. Select the host USB device which is connected to the PPBE virtual machine and click **Next**.



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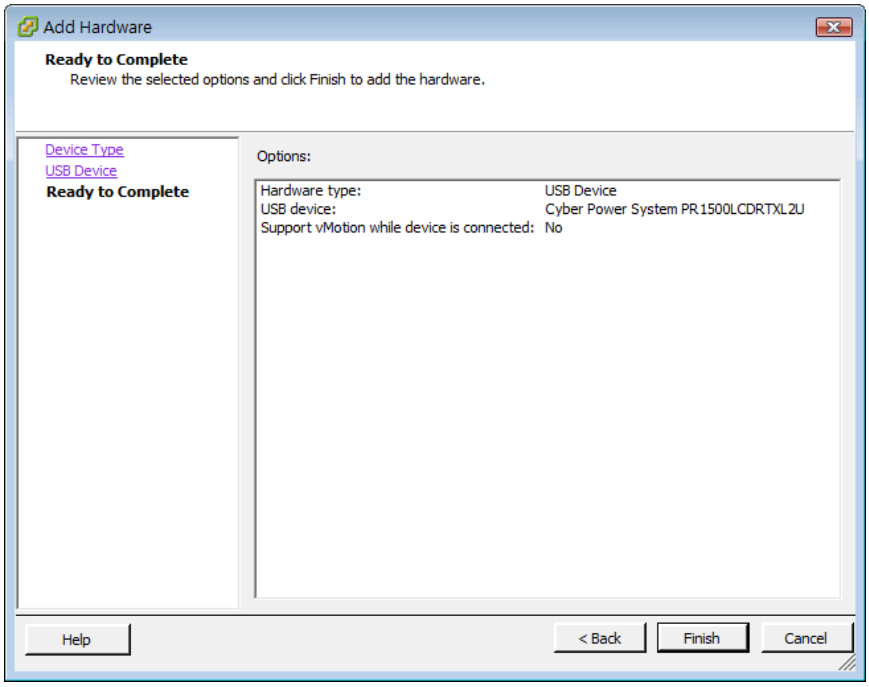
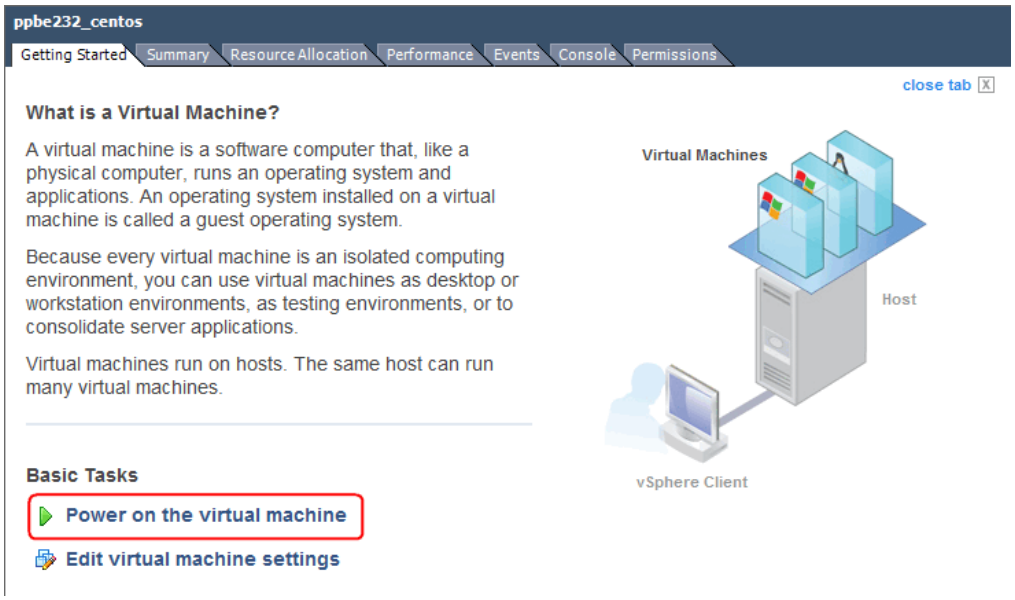
2. CONFIGURATION 2

9-8. USB device details will be displayed. Click **Finish** to complete the process. This will add a new USB device.



10. Click **Power on the virtual machine** to power on the virtual machine and access the PPBE VA Agent.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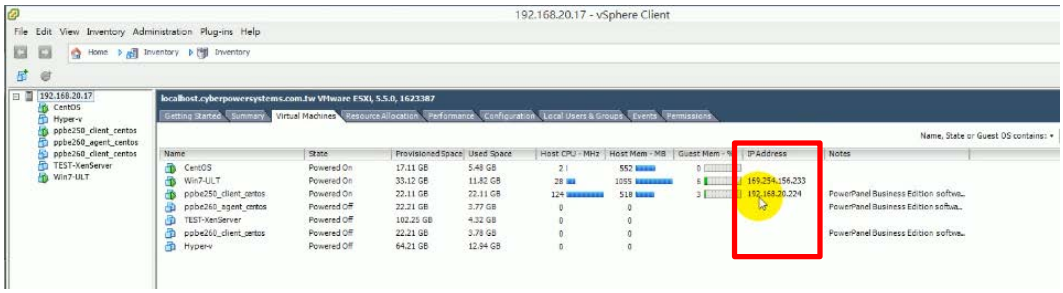
2. CONFIGURATION 2

11. Follow the steps below to complete the PPBE VA Agent configuration.

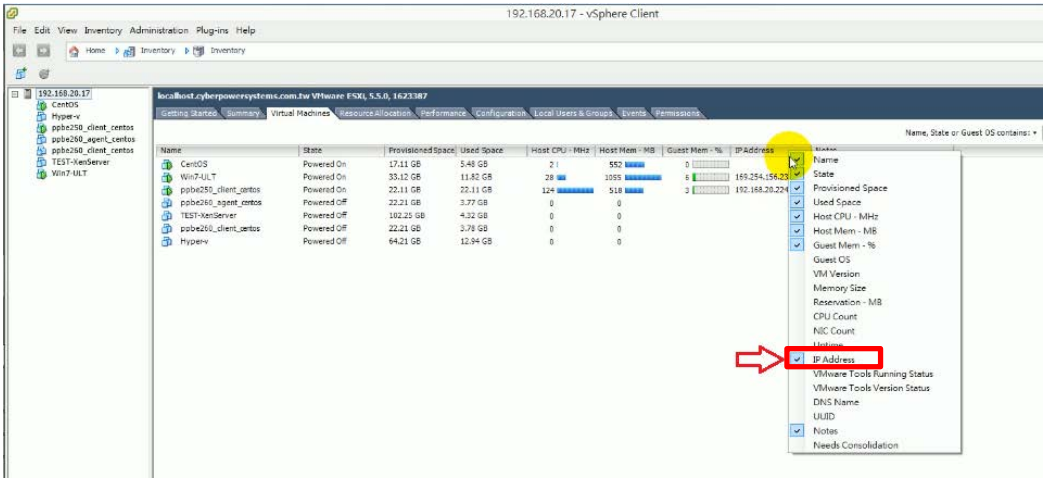
11-1. In order to login to PPBE VA Agent, you will need to know the IP address of the PPBE virtual appliance.

(1) Login VMware vSphere Client with IP and ID/Password of the host.

(2) Open the **Virtual Machines** tab to see all VMs and their respective IP address.


192.168.20.17 - vSphere Client
File Edit View Inventory Administration Plug-ins Help
Home Inventory Inventory
192.168.20.17
CentOS
Hyper-v
ppbe250_client_centos
ppbe260_agent_centos
ppbe260_client_centos
TEST-XenServer
Win7-ULT
localhost.cyberpowersystems.com.tw VMware ESXi, 5.5.0, 1623387
Getting Started Summary Virtual Machines Resource Allocation Performance Configuration Local Users & Groups Events Permissions
Name, State or Guest OS contains:
Name State Provisioned Space Used Space Host CPU - MHz Host Mem - MB Guest Mem - % IP Address Notes
CentOS Powered On 17.11 GB 5.48 GB 2 552 0
Win7-ULT Powered On 33.12 GB 11.82 GB 28 1055 6 169.254.156.233
ppbe250_client_centos Powered On 22.11 GB 22.11 GB 124 518 3 192.168.20.224 PowerPanel Business Edition softwa...
ppbe260_agent_centos Powered Off 22.21 GB 3.77 GB 0 0 PowerPanel Business Edition softwa...
TEST-XenServer Powered Off 102.25 GB 4.32 GB 0 0
ppbe260_client_centos Powered Off 22.21 GB 3.78 GB 0 0 PowerPanel Business Edition softwa...
Hyper-v Powered Off 64.21 GB 12.94 GB 0 0

(3) If the IP address is not displayed, right-click to open the pop-up menu. Check **IP Address** to display the IP address.


192.168.20.17 - vSphere Client
File Edit View Inventory Administration Plug-ins Help
Home Inventory Inventory
192.168.20.17
CentOS
Hyper-v
ppbe250_client_centos
ppbe260_agent_centos
ppbe260_client_centos
TEST-XenServer
Win7-ULT
localhost.cyberpowersystems.com.tw VMware ESXi, 5.5.0, 1623387
Getting Started Summary Virtual Machines Resource Allocation Performance Configuration Local Users & Groups Events Permissions
Name, State or Guest OS contains:
Name State Provisioned Space Used Space Host CPU - MHz Host Mem - MB Guest Mem - % IP Address
CentOS Powered On 17.11 GB 5.48 GB 2 552 0
Win7-ULT Powered On 33.12 GB 11.82 GB 28 1055 6 169.254.156.233
ppbe250_client_centos Powered On 22.11 GB 22.11 GB 124 518 3 192.168.20.224
ppbe260_agent_centos Powered Off 22.21 GB 3.77 GB 0 0
TEST-XenServer Powered Off 102.25 GB 4.32 GB 0 0
ppbe260_client_centos Powered Off 22.21 GB 3.78 GB 0 0
Hyper-v Powered Off 64.21 GB 12.94 GB 0 0
Name
State
Provisioned Space
Used Space
Host CPU - MHz
Host Mem - MB
Guest Mem - %
Guest OS
VM Version
Memory Size
Reservation - MB
CPU Count
NIC Count
IP Address
VMware Tools Running Status
VMware Tools Version Status
DNS Name
UUID
Notes
Needs Consolidation

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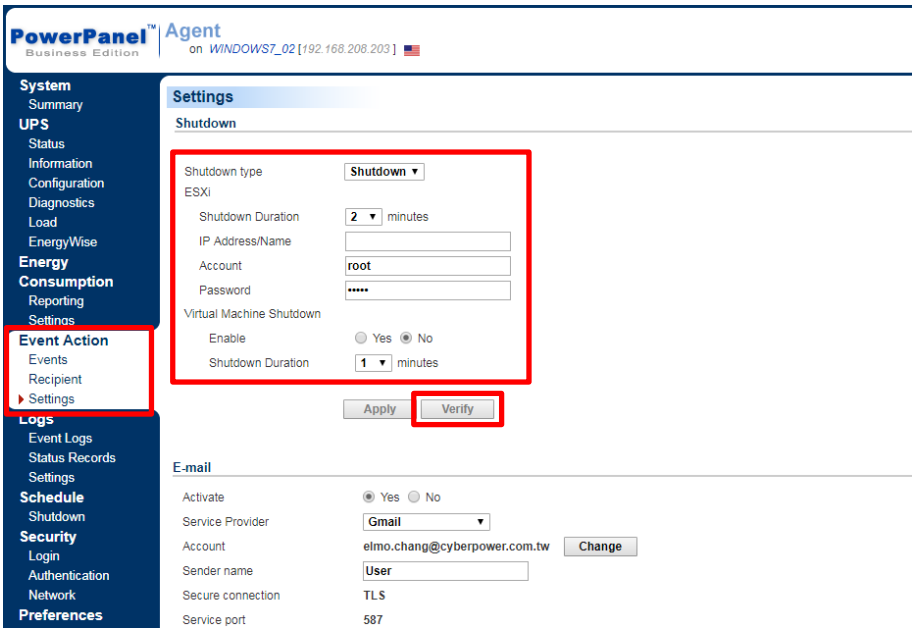
2. CONFIGURATION 2

11-2. Login to PPBE VA Agent through any supported web browser.
Go to http://xxx.xxx.xxx.xxx:3052 where xxx.xxx.xxx.xxx is the IP address of the PPBE VA, and login with username/Password: **admin/admin** (default).

11-3. Configure Shutdown Action for ESXi.

In order to ensure the ESX/ESXi host and all virtual machines can be shut down correctly in case of power events, users have to configure the ESXi host address, account and password of root user for the host shutdown from the virtual machine running Agent. Enter actual user name and password for ESXi host in the Host Address, Account and Password fields on the **Event Action** → **Settings** page.

***Note: Host Address** is the IP address of the ESXi host computer.*



11-4. Go to **Event Action** → **Settings** to set necessary shutdown time for the ESXi host.

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2. CONFIGURATION 2

Note:

Necessary shutdown time*: Set the shutdown time for VMware ESXi host / VM.*

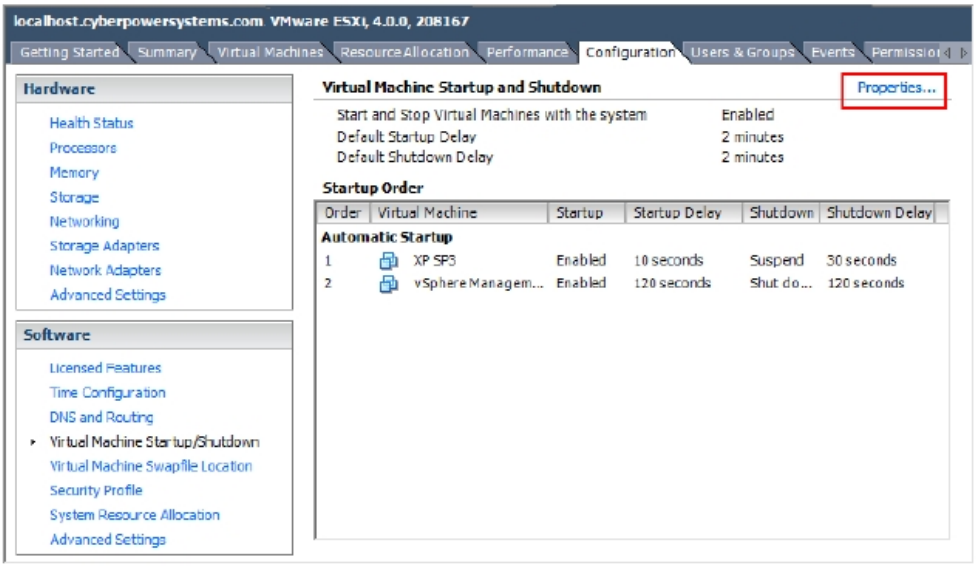
Address*: The IP address of the host computer.*

Account*: The username that you use to access host via "VMware vSphere Client".*

Password*: The password that you use to access host via "VMware vSphere Client".*

*After clicking **Apply**, you can test if the Account/Password can access the host by clicking **Verify**.*

12. Configure Startup and Shutdown of Virtual Machines on ESX/ESXi.
In order to ensure that all virtual machines shut down and restart gracefully, check the “Virtual Machine Startup and Shutdown” setting through vSphere menu by going to **Configuration** → **Virtual Machine Startup and Shutdown** → **Properties**.



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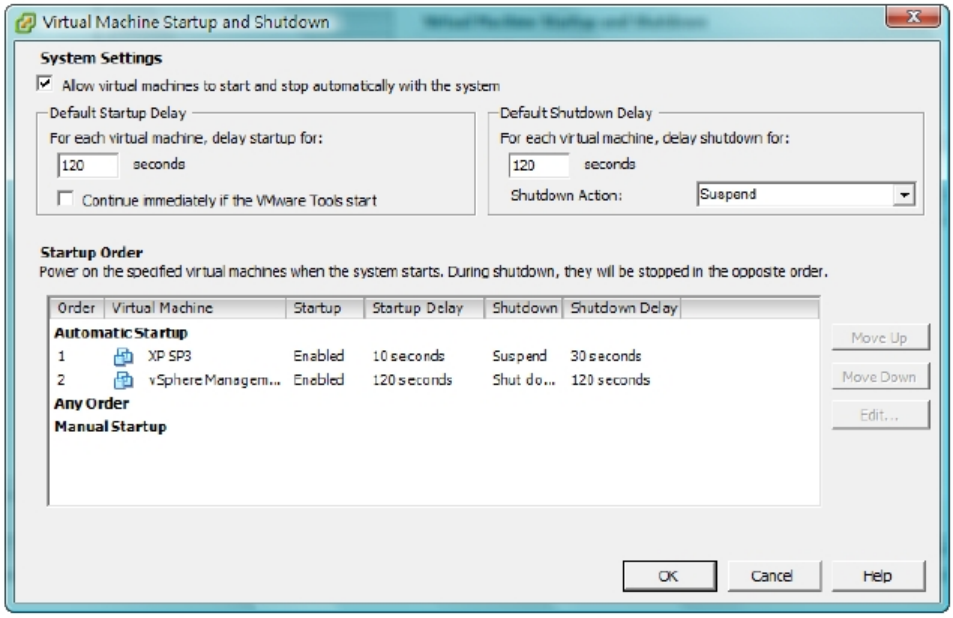
2. CONFIGURATION 2

13. Check **Allow virtual machines to start and stop automatically with the system** to enable this option.



✓ **DONE!** Now you can test and see if the host can work with the UPS properly.

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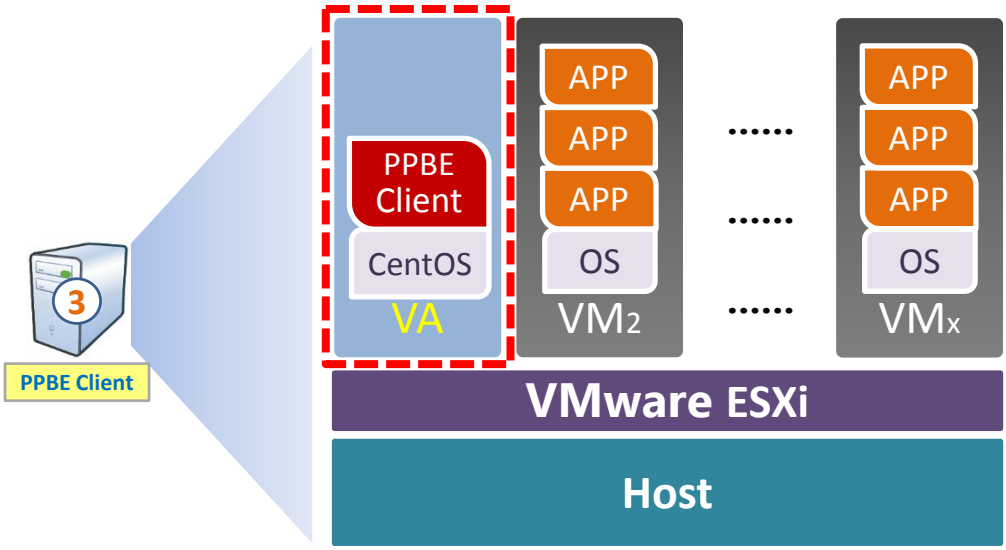
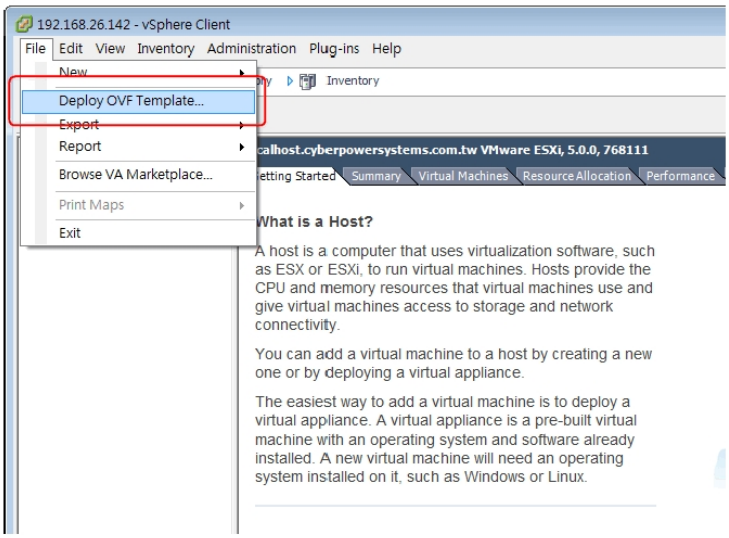
2. CONFIGURATION 3

Install PPBE VA Client



1. Download the latest version of **PPBE Client Virtual Appliance** from CyberPower official website.
2. Launch the vShpere Client. Open the **Deploy OVF Template** window from **File** → **Deploy OVF Template…**.


192.168.26.142 - vSphere Client
File Edit View Inventory Administration Plug-ins Help
New
Deploy OVF Template...
Export
Report
Browse VA Marketplace...
Print Maps
Exit
Inventory
Summary
Virtual Machines
Resource Allocation
Performance
What is a Host?
A host is a computer that uses virtualization software, such as ESX or ESXi, to run virtual machines. Hosts provide the CPU and memory resources that virtual machines use and give virtual machines access to storage and network connectivity.
You can add a virtual machine to a host by creating a new one or by deploying a virtual appliance.
The easiest way to add a virtual machine is to deploy a virtual appliance. A virtual appliance is a pre-built virtual machine with an operating system and software already installed. A new virtual machine will need an operating system installed on it, such as Windows or Linux.

Note: *If your VMware ESXi is v6.5 or above, please use* ***vSphere Web Client*** *because vSphere Client is not supported.*

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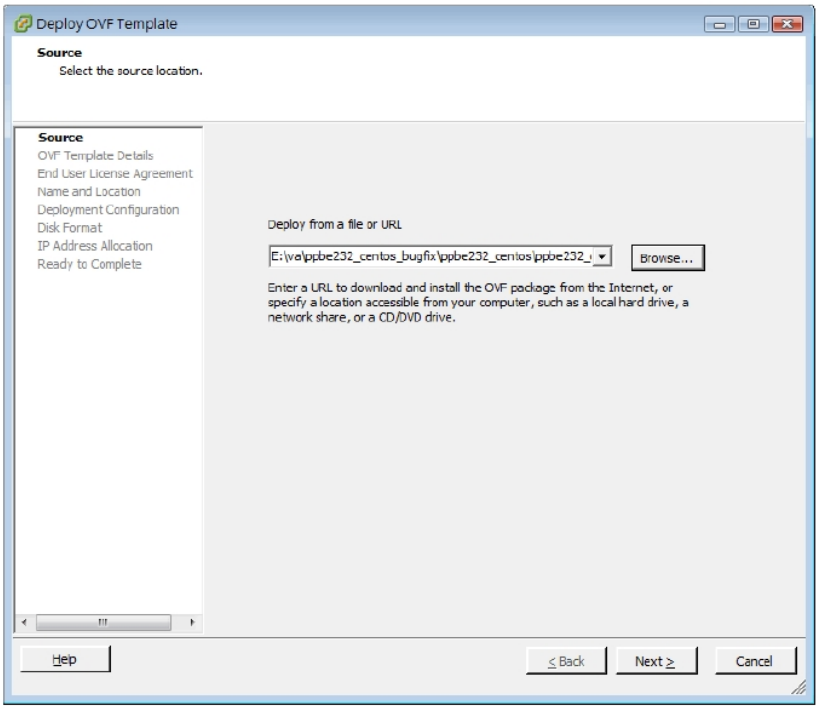
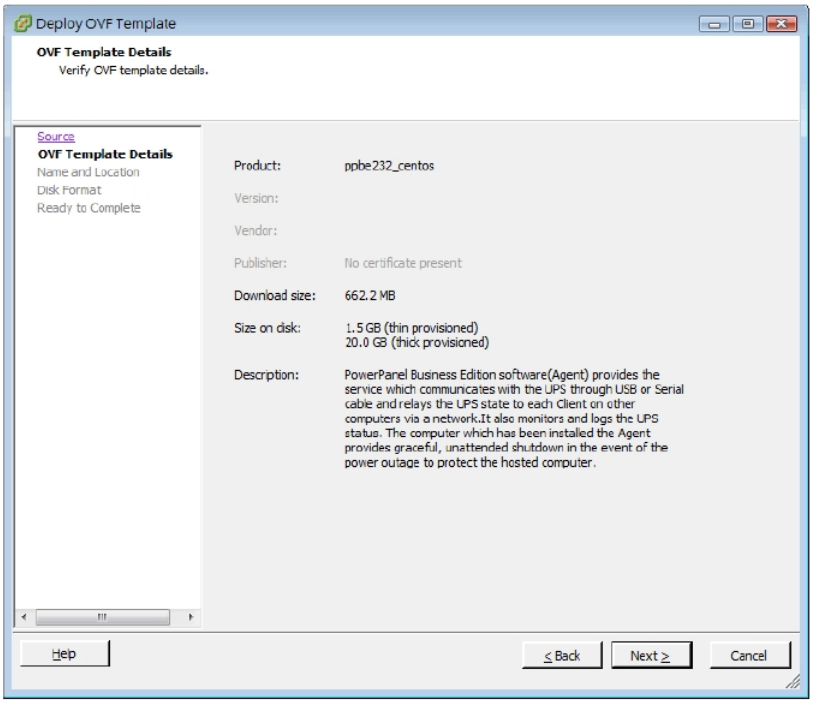
2. CONFIGURATION 3

3. Click **Browse** to import the **ppbeXXX_centos.ovf** extracted from the downloaded zip file. Click **Next** to start the deployment task.


Deploy OVF Template
Source
Select the source location.
Source
OVF Template Details
End User License Agreement
Name and Location
Deployment Configuration
Disk Format
IP Address Allocation
Ready to Complete
Deploy from a file or URL
E:\va\ppbe232_centos_bugfix\ppbe232_centos\ppbe232_
Browse...
Enter a URL to download and install the OVF package from the Internet, or specify a location accessible from your computer, such as a local hard drive, a network share, or a CD/DVD drive.
Help
< Back
Next >
Cancel

4. The OVF Template Details will be displayed. Click **Next** to continue.


Deploy OVF Template
OVF Template Details
Verify OVF template details.
Source
OVF Template Details
Name and Location
Disk Format
Ready to Complete
Product: ppbe232_centos
Version:
Vendor:
Publisher: No certificate present
Download size: 662.2 MB
Size on disk: 1.5 GB (thin provisioned)
20.0 GB (thick provisioned)
Description: PowerPanel Business Edition software(Agent) provides the service which communicates with the UPS through USB or Serial cable and relays the UPS state to each Client on other computers via a network.It also monitors and logs the UPS status. The computer which has been installed the Agent provides graceful, unattended shutdown in the event of the power outage to protect the hosted computer.
Help
< Back
Next >
Cancel

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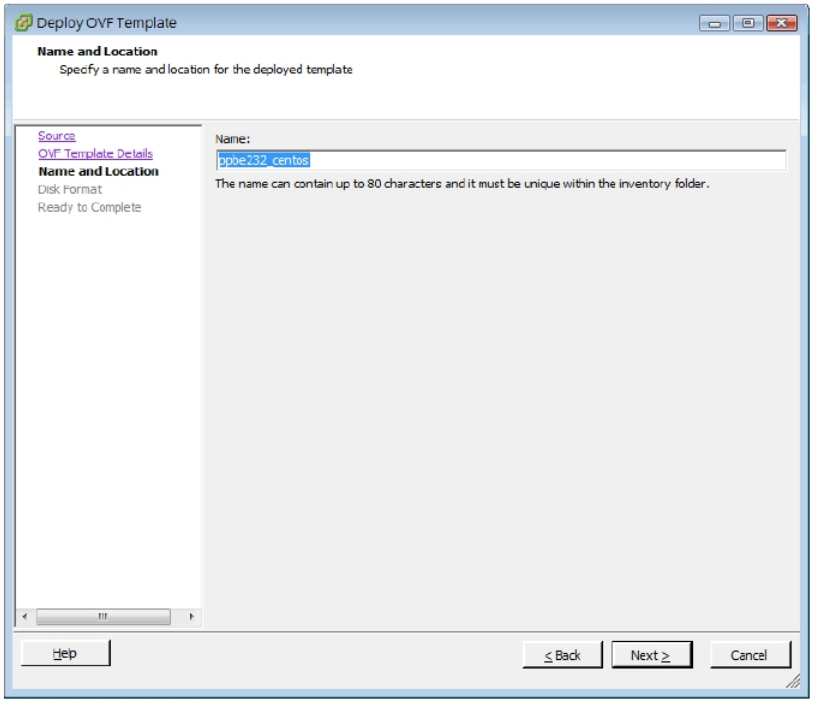
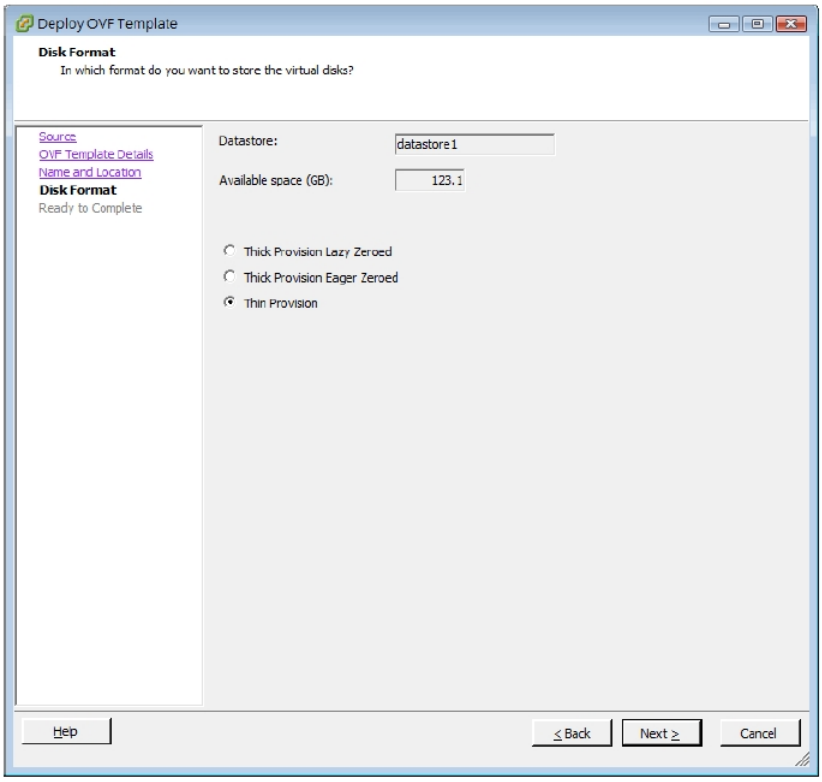
2. CONFIGURATION 3

5. Enter a name for the deployed PPBE virtual appliance. This name should be unique within the inventory. Click **Next** to continue.



6. Select the virtual disk format for the PPBE virtual appliance. The default option is **Thin Provision**. Click **Next** to continue.



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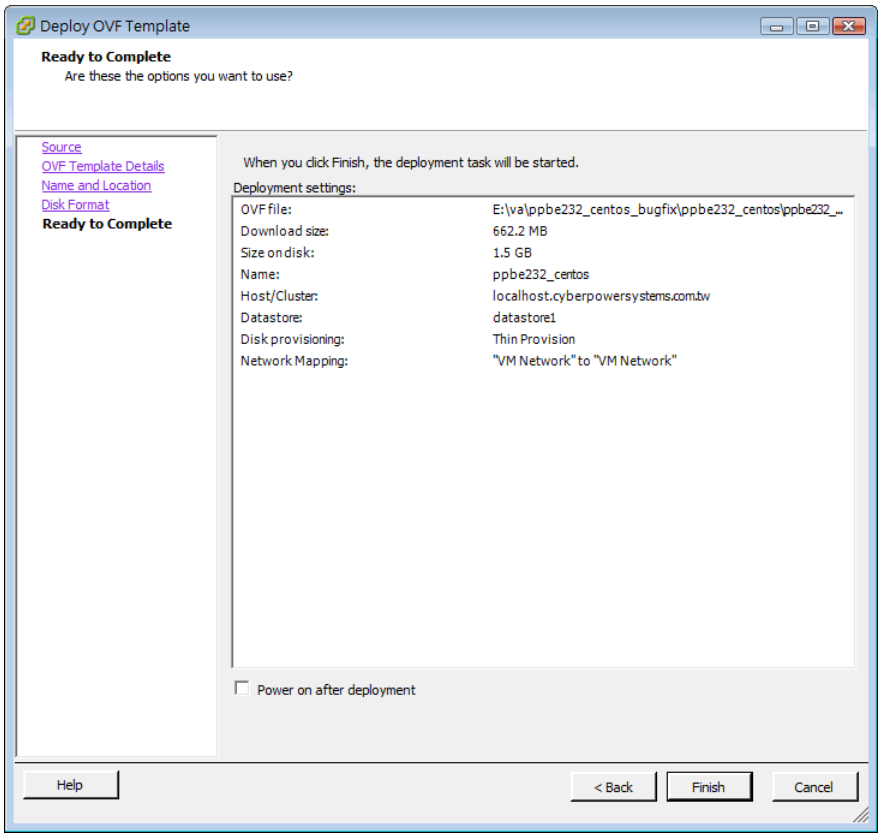
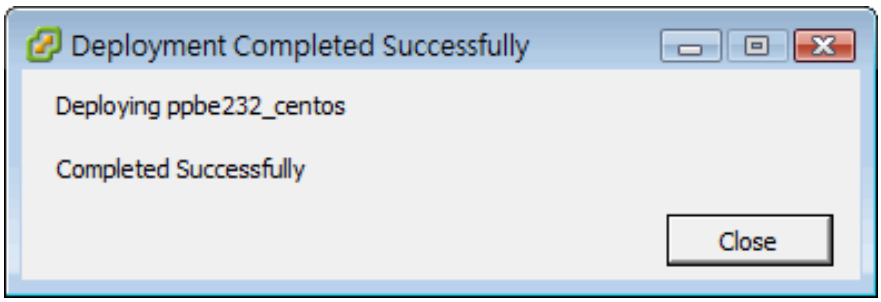
2. CONFIGURATION 3

7. The deployment details will be displayed. Click **Finish** to start the deployment task.



8. After the deployment task is completed, the PPBE virtual appliance will be added into the inventory.



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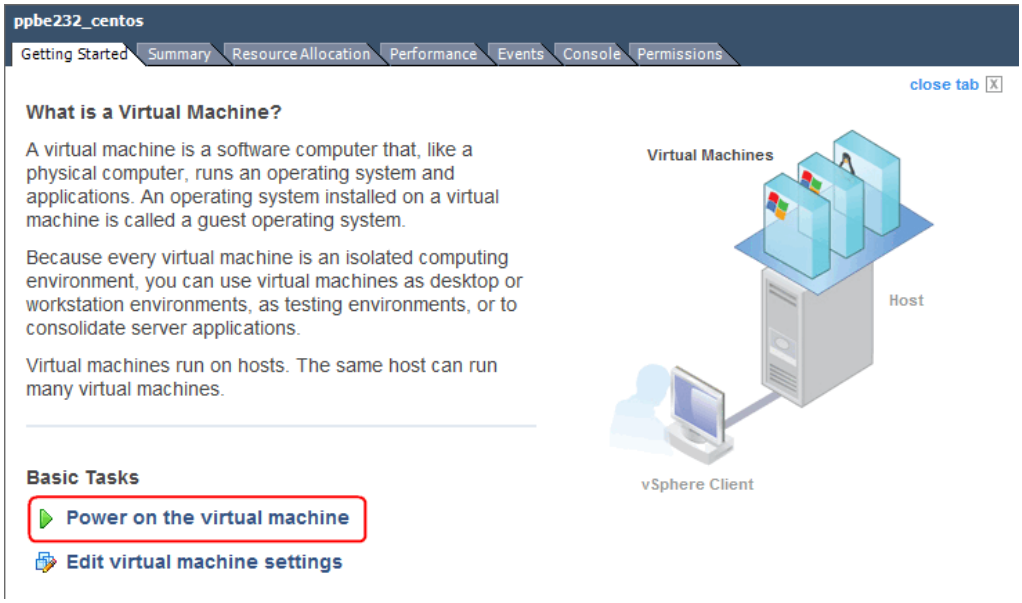
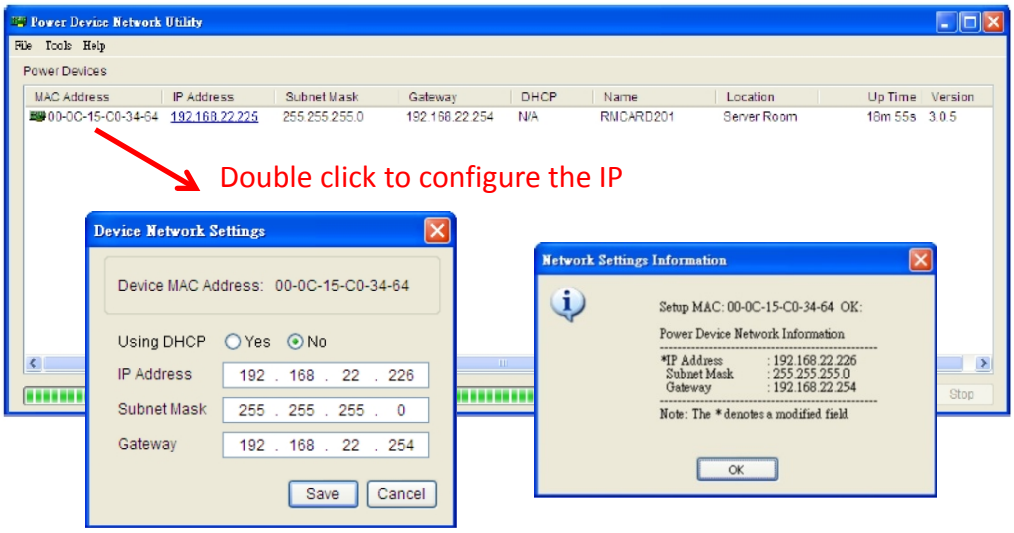
2. CONFIGURATION 3

9. Click **Power on the virtual machine** to power on the virtual machine and be ready to access the PPBE.


ppbe232_centos
Getting Started
Summary
Resource Allocation
Performance
Events
Console
Permissions
close tab
What is a Virtual Machine?
A virtual machine is a software computer that, like a physical computer, runs an operating system and applications. An operating system installed on a virtual machine is called a guest operating system.
Because every virtual machine is an isolated computing environment, you can use virtual machines as desktop or workstation environments, as testing environments, or to consolidate server applications.
Virtual machines run on hosts. The same host can run many virtual machines.
Virtual Machines
Host
vSphere Client
Basic Tasks
Power on the virtual machine
Edit virtual machine settings

10. If your UPS has an RMCARD installed, use “Power Device Network Utility” to discover the IP address of the RMCARD or to assign a static IP address.



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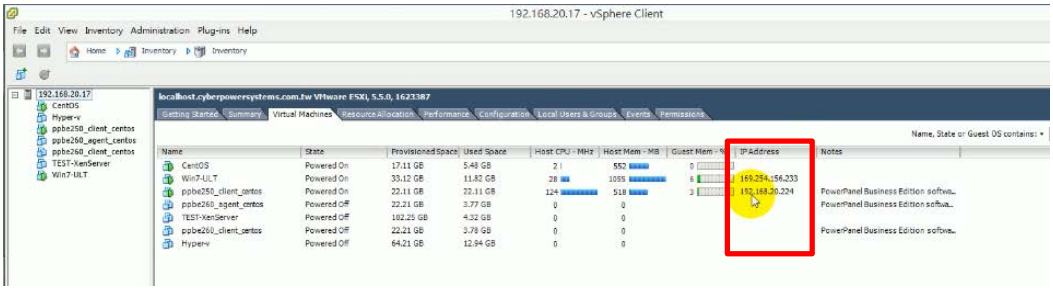
2. CONFIGURATION 3

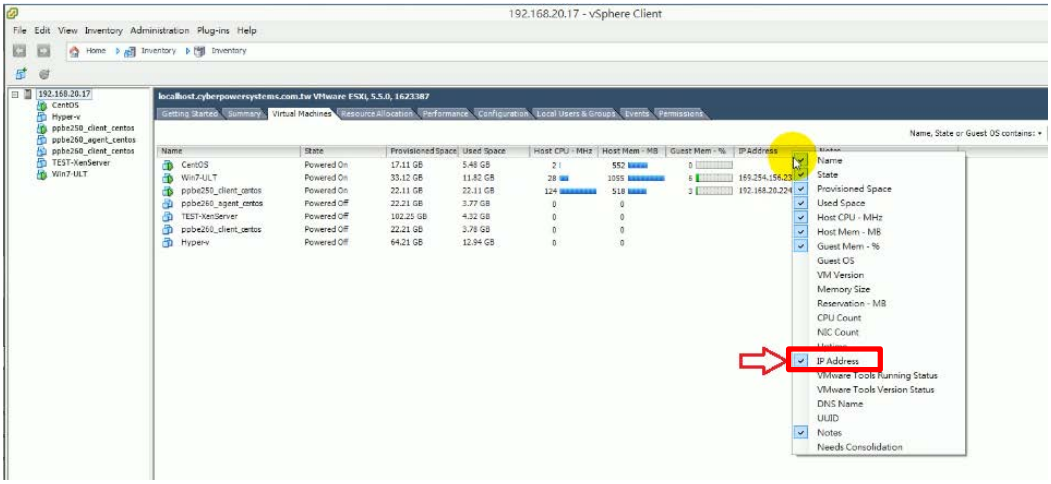
10-1. Before logging in to PPBE Client, you need to know the IP address of the PPBE virtual appliance:

(1) Login to VMware vSphere Client with IP address and username/Password of the host.

(2) Open the **Virtual Machines** tab to see all VMs and their respective IP address.


192.168.20.17 - vSphere Client
File Edit View Inventory Administration Plug-ins Help
Home Inventory Inventory
192.168.20.17
CentOS
Hyper-v
ppbe250_client_centos
ppbe260_agent_centos
ppbe260_client_centos
TEST-XenServer
Win7-ULT
localhost.cyberpowersystems.com.tw VMware ESXi, 5.5.0, 1623387
Getting Started Summary Virtual Machines Resource Allocation Performance Configuration Local Users & Groups Events Permissions
Name, State or Guest OS contains:
Name State Provisioned Space Used Space Host CPU - MHz Host Mem - MB Guest Mem - % IP Address Notes
CentOS Powered On 17.11 GB 5.48 GB 2 552 0
Win7-ULT Powered On 33.12 GB 11.82 GB 28 1055 6 169.254.156.233
ppbe250_client_centos Powered On 22.11 GB 22.11 GB 124 518 3 192.168.20.224 PowerPanel Business Edition softwa...
ppbe260_agent_centos Powered Off 22.21 GB 3.77 GB 0 0 PowerPanel Business Edition softwa...
TEST-XenServer Powered Off 102.25 GB 4.32 GB 0 0
ppbe260_client_centos Powered Off 22.21 GB 3.78 GB 0 0 PowerPanel Business Edition softwa...
Hyper-v Powered Off 64.21 GB 12.94 GB 0 0

(3) If the IP address is not displayed, right click to open the pop-up menu. Check **IP Address** to display the IP address.


192.168.20.17 - vSphere Client
File Edit View Inventory Administration Plug-ins Help
Home Inventory Inventory
192.168.20.17
CentOS
Hyper-v
ppbe250_client_centos
ppbe260_agent_centos
ppbe260_client_centos
TEST-XenServer
Win7-ULT
localhost.cyberpowersystems.com.tw VMware ESXi, 5.5.0, 1623387
Getting Started Summary Virtual Machines Resource Allocation Performance Configuration Local Users & Groups Events Permissions
Name, State or Guest OS contains:
Name State Provisioned Space Used Space Host CPU - MHz Host Mem - MB Guest Mem - % IP Address
CentOS Powered On 17.11 GB 5.48 GB 2 552 0
Win7-ULT Powered On 33.12 GB 11.82 GB 28 1055 6 169.254.156.233
ppbe250_client_centos Powered On 22.11 GB 22.11 GB 124 518 3 192.168.20.224
ppbe260_agent_centos Powered Off 22.21 GB 3.77 GB 0 0
TEST-XenServer Powered Off 102.25 GB 4.32 GB 0 0
ppbe260_client_centos Powered Off 22.21 GB 3.78 GB 0 0
Hyper-v Powered Off 64.21 GB 12.94 GB 0 0
Name
State
Provisioned Space
Used Space
Host CPU - MHz
Host Mem - MB
Guest Mem - %
Guest OS
VM Version
Memory Size
Reservation - MB
CPU Count
NIC Count
IP Address
VMware Tools Running Status
VMware Tools Version Status
DNS Name
UUID
Notes
Needs Consolidation

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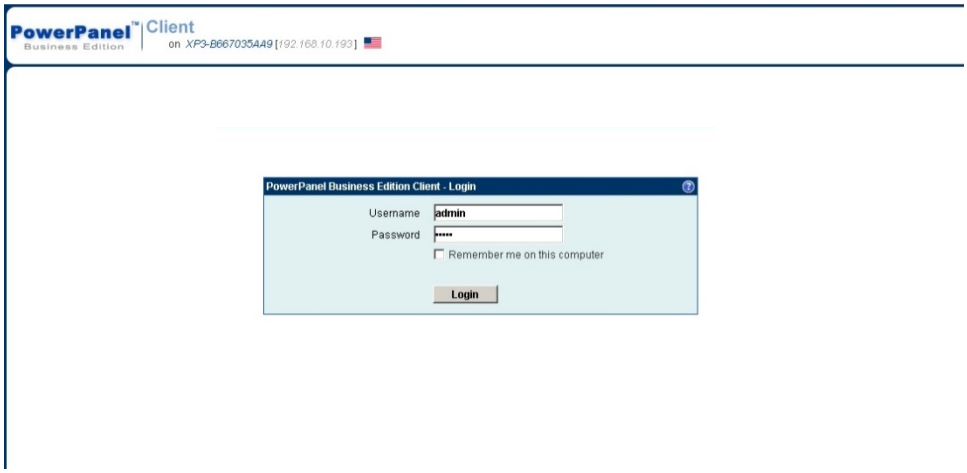
2. CONFIGURATION 3

11. Follow the steps below to complete the PPBE VA Client configuration.

11-1. Login to PPBE VA Client through any supported web browser. Go to http://xxx.xxx.xxx.xxx:3052 where xxx.xxx.xxx.xxx is the IP address of the VA, and login with the default Username/Password: **admin/admin**.

Note: *If you don't know the IP address of PPBE virtual appliance, see step 10-1.*



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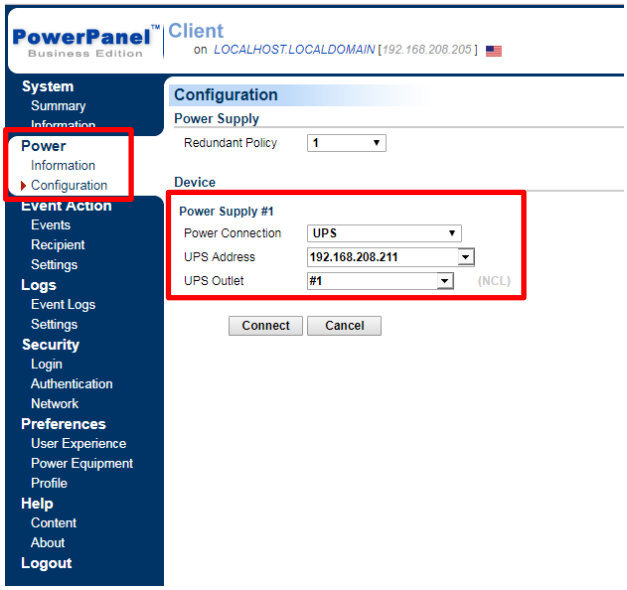
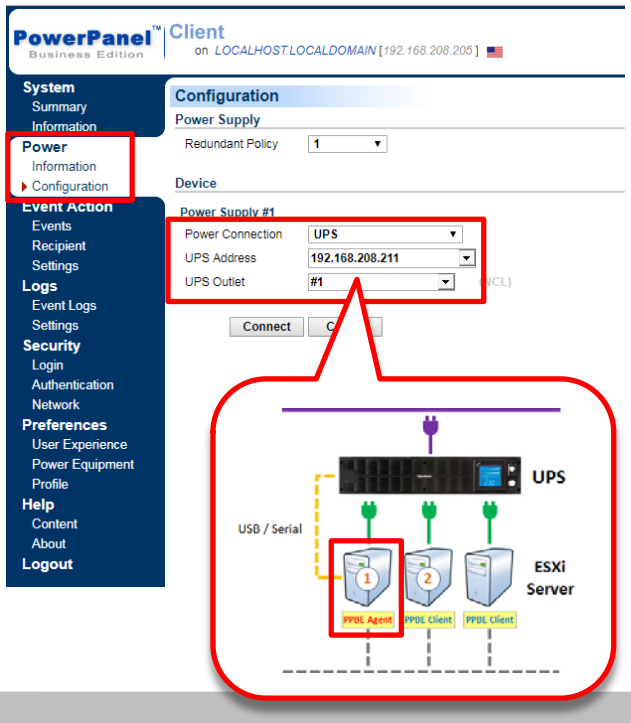
2. CONFIGURATION 3

11-2. Go to the Power → Configuration screen and set the IP address of the RMCARD (if the UPS has an RMCARD installed) and assign the UPS outlet to which the ESXi host is connected to.



11-3. If the UPS does NOT have an RMCARD installed, set the IP address of a neighbor ESXi host server which has PPBE VA Agent installed and is powered by the same UPS (see below diagram).

After assigning the correct IP address, assign the UPS outlet to which the ESXi host is connected to.



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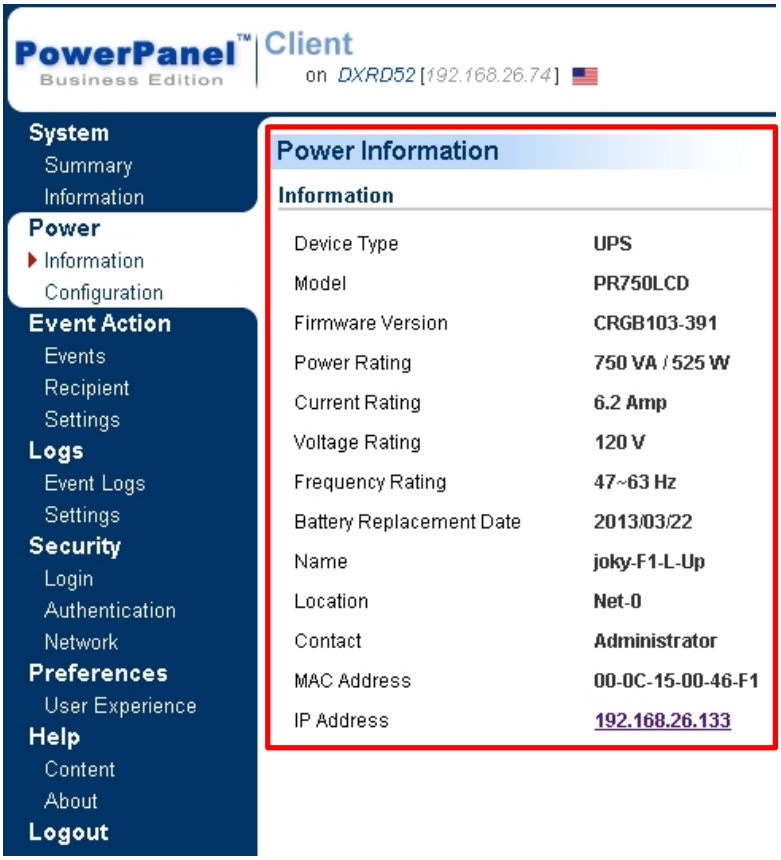
2. CONFIGURATION 3

11-4. Go to the **Power** → **Information** screen. If the correct IP address is assigned, the corresponding UPS information will be displayed in PPBE VA Client.



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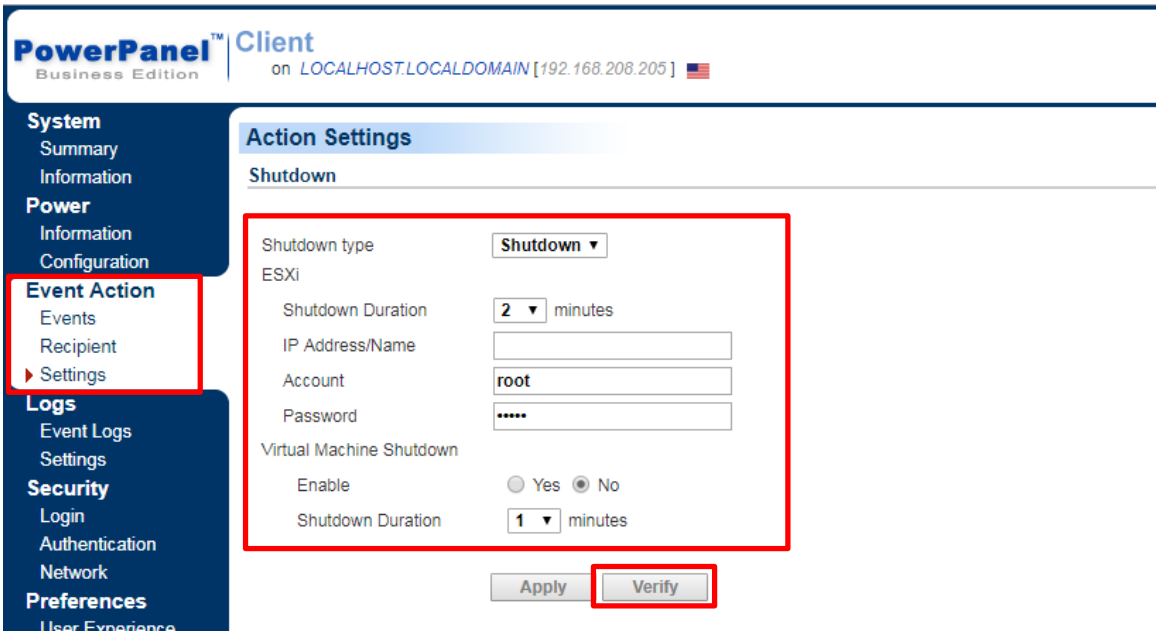
2. CONFIGURATION 3

11-5. Go to **Event Action** → **Settings** to set the necessary shutdown time for the ESXi host.



Note:

Shutdown Duration*: Set the shutdown time for VMware ESXi host / VM.*

Address*: The IP address of the host computer.*

Account*: The account that you use to access host via "VMware vSphere Client".*

Password*: The password that you use to access host via "VMware vSphere Client".*

*After clicking **Apply**, you can test if the Account/Password can access the host by clicking **Verify**.*

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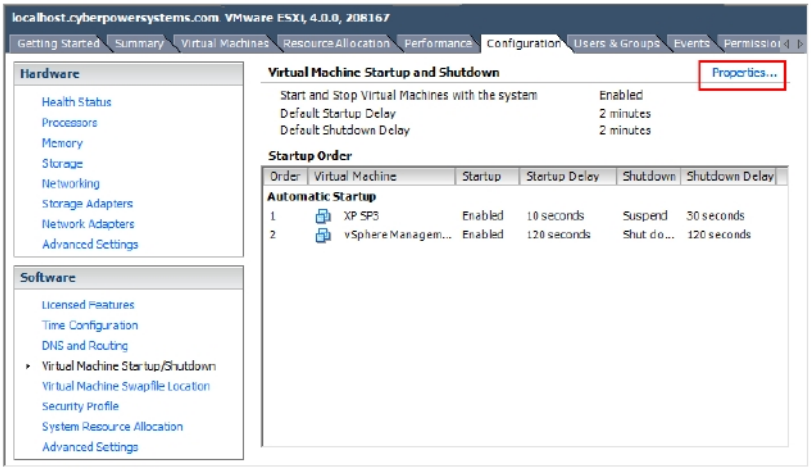
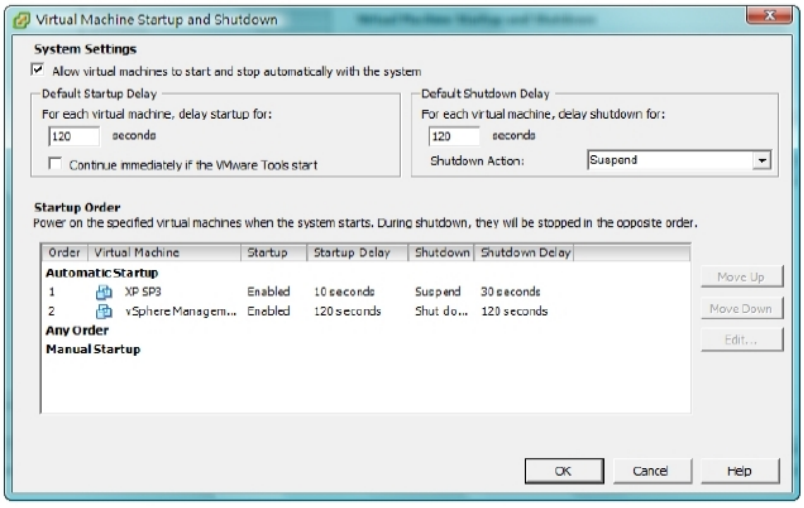
2. CONFIGURATION 3

12. Configure Startup and Shutdown of Virtual Machines on ESX/ESXi.
In order to ensure that all virtual machines could be shut down and restart gracefully, check the "Virtual Machine Startup and Shutdown" setting through vSphere menu by going to **Configuration → Virtual Machine Startup and Shutdown → Properties**.



13. Check **Allow virtual machines to start and stop automatically with the system** to enable this option.



✓ **DONE!** Now you can test and see if the host can work with the UPS properly.

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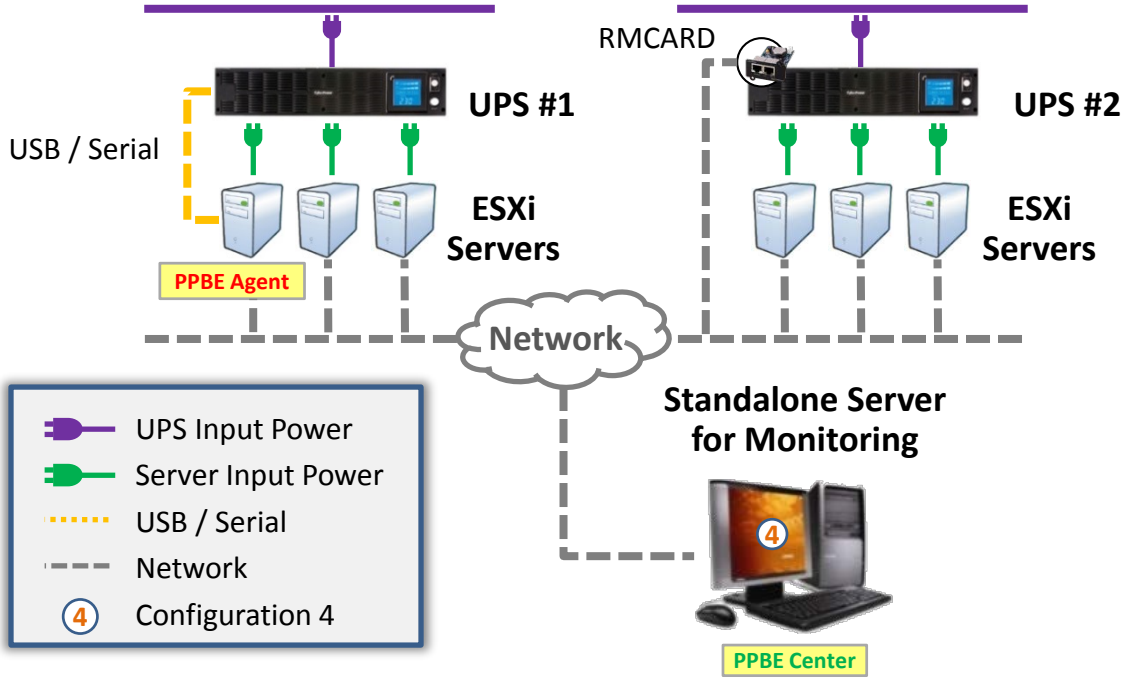
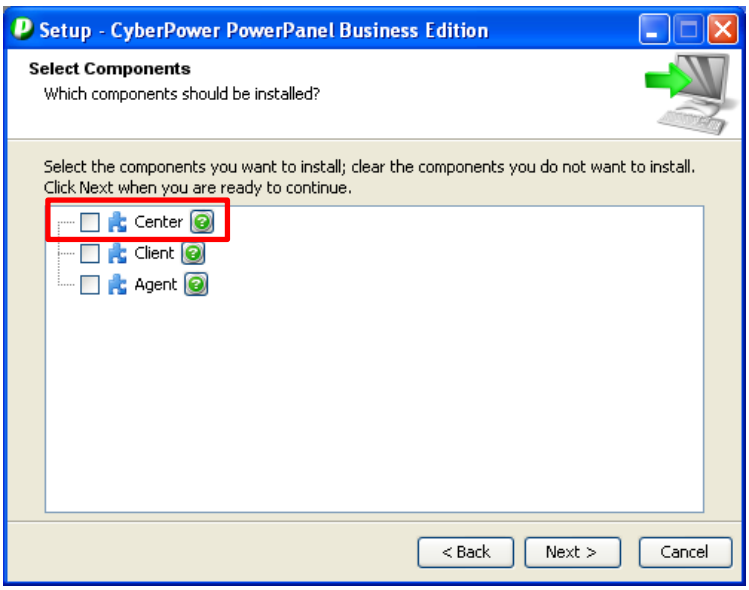
2. CONFIGURATION 4

Install PPBE Center



1. Download the latest version of **PPBE** from CyberPower official website. Please select the correct download for the OS running on the standalone computer that will be used for PPBE Center.
2. When prompted in the installation wizard, select **Center**.


Setup - CyberPower PowerPanel Business Edition
Select Components
Which components should be installed?
Select the components you want to install; clear the components you do not want to install.
Click Next when you are ready to continue.
Center
Client
Agent
< Back
Next >
Cancel

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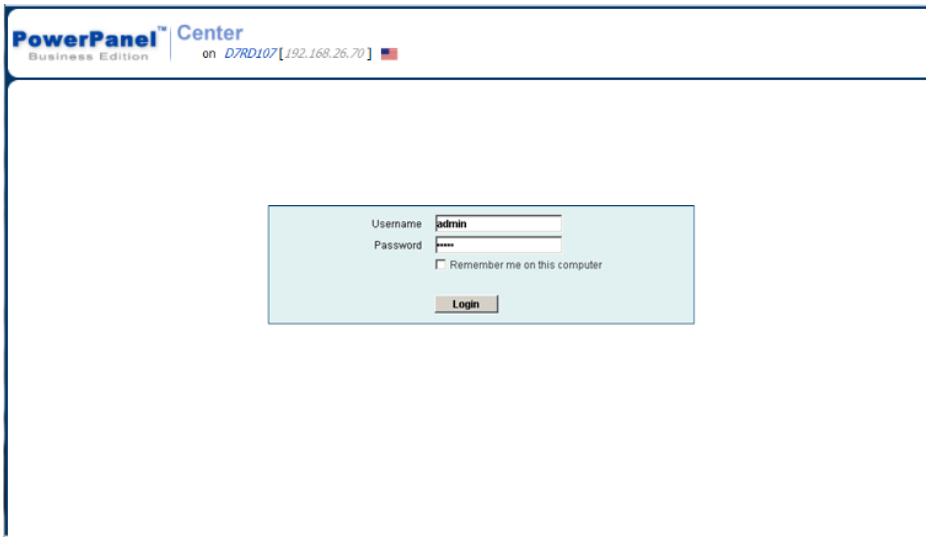
2. CONFIGURATION 4

3. Login to PPBE Center through any supported web browser.

Go to http://xxx.xxx.xxx.xxx:3052 where xxx.xxx.xxx.xxx is the IP address of the center computer, and login with the default Username/Password: **admin/admin**.



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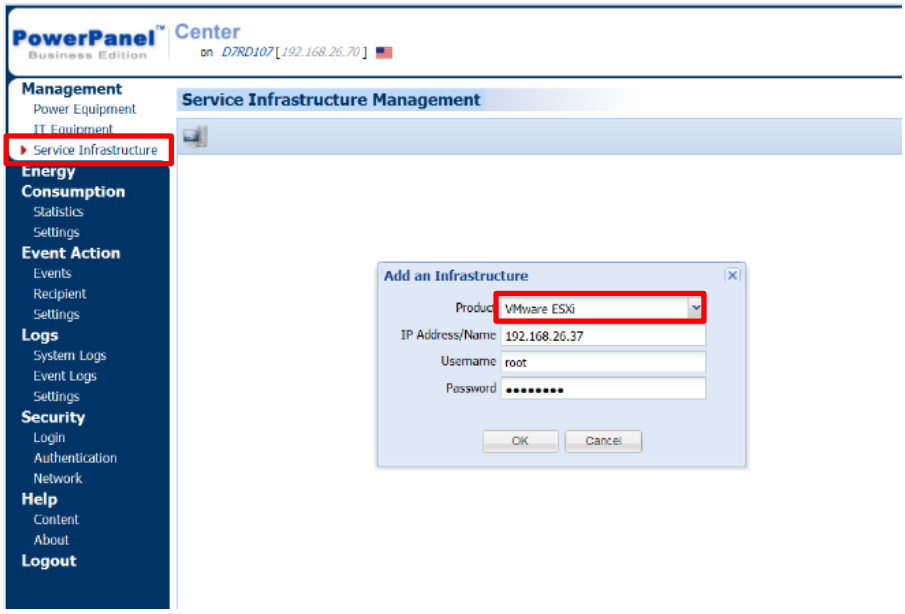
2. CONFIGURATION 4

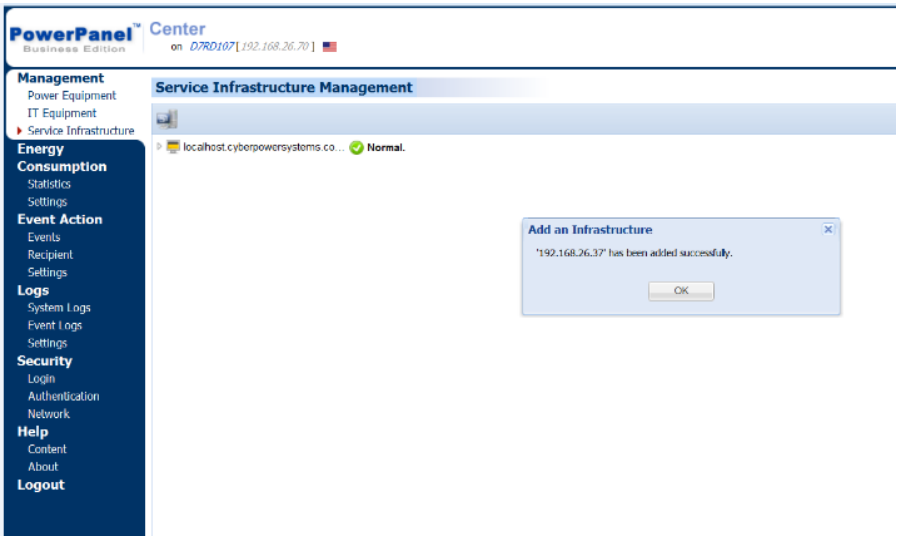
4. To add a new ESXi server in PPBE Center, go to the **Management → Service Infrastructure** screen, click on the **Add Infrastructure** icon.

Note: *Before you add ESXi server, you must add all UPSs first on the "Power Equipment" page. Please refer to PPBE user's manual in the section "**Using PPBE Center → Device Management**".*

Select **VMware ESXi** from the drop-down list of **Product** item and enter related information including access username and password of the ESXi server.



5. The icon of the new ESXi server will be displayed if the configuration is successful



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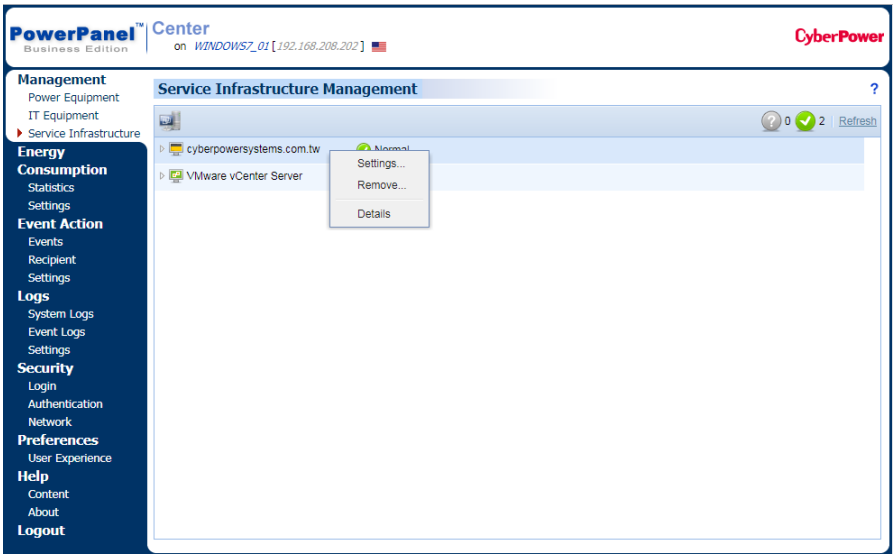
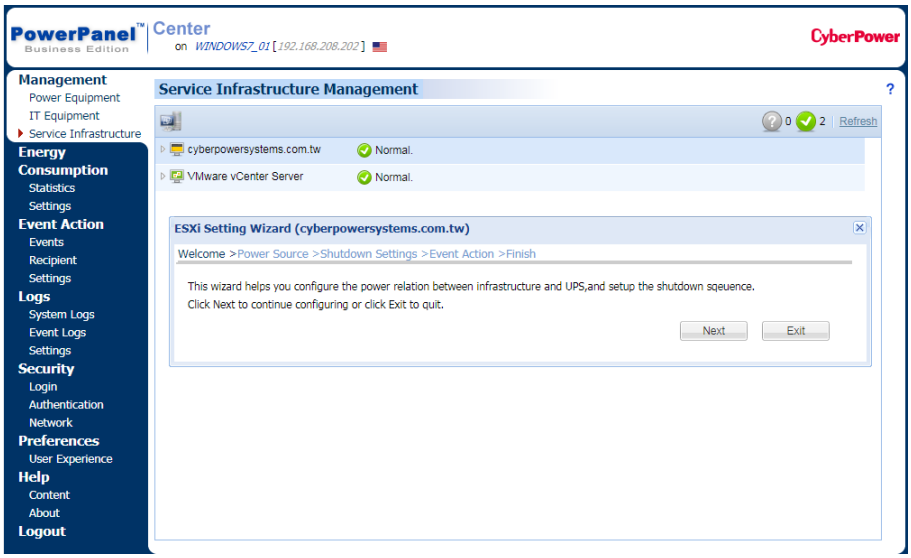
2. CONFIGURATION 4

6. To correctly set the power source (UPS) of all added ESXi hosts, click the device icons (ESXi hosts) and select "**Settings**".



6-1. The "ESXi Setting Wizard" will appear. Please click "Next" to continue.



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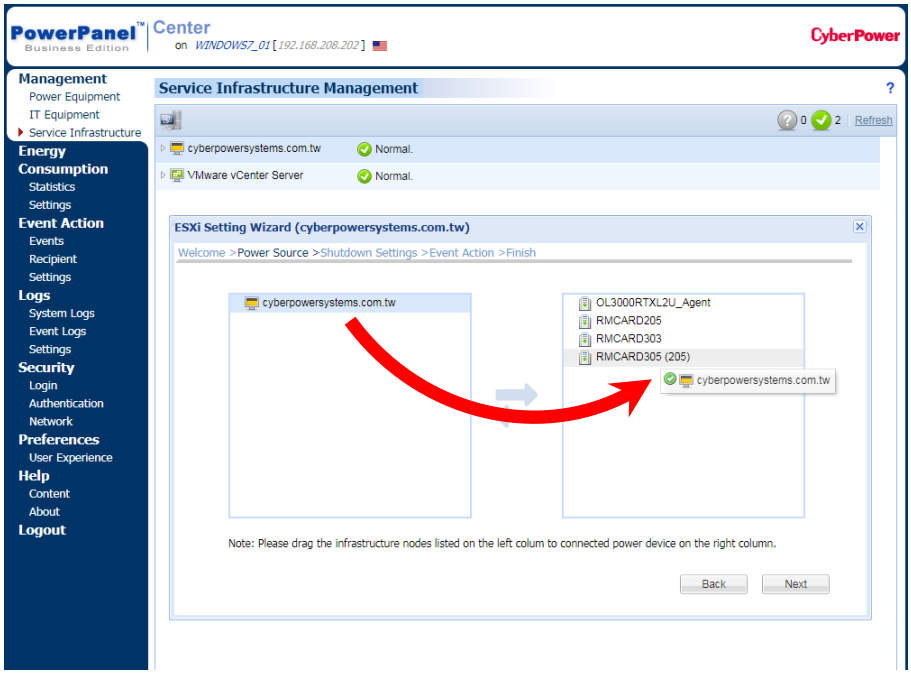
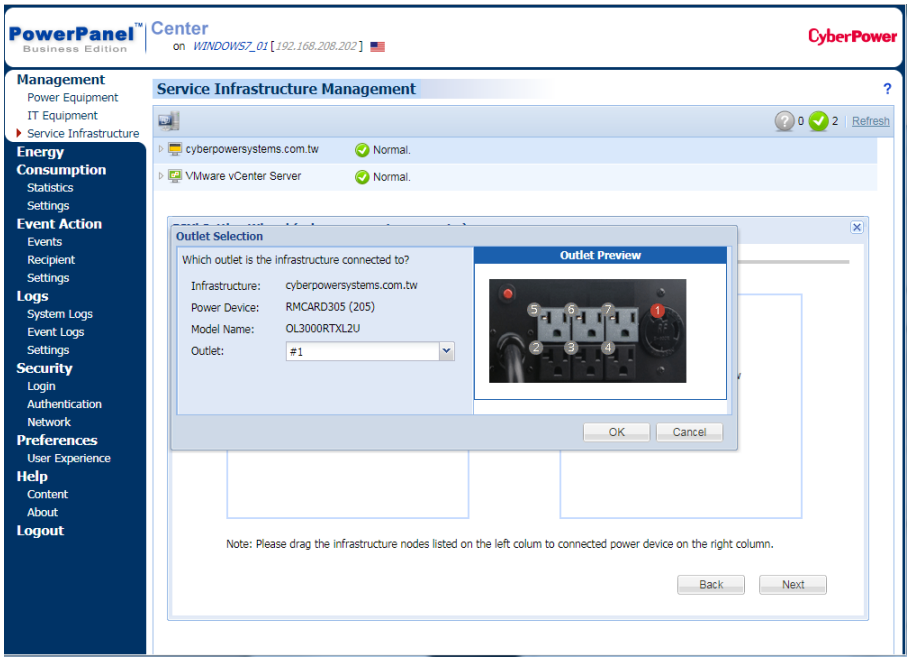
2. CONFIGURATION 4

6-2. To assign the power source (UPS) to the ESXi server, select it from the left column, drag and drop it beneath the correct UPS in the right column.



6-3. In the “Outlet Selection” step, assign the correct UPS outlet used by the ESXi server and click “OK”. Then click “Next” to continue.



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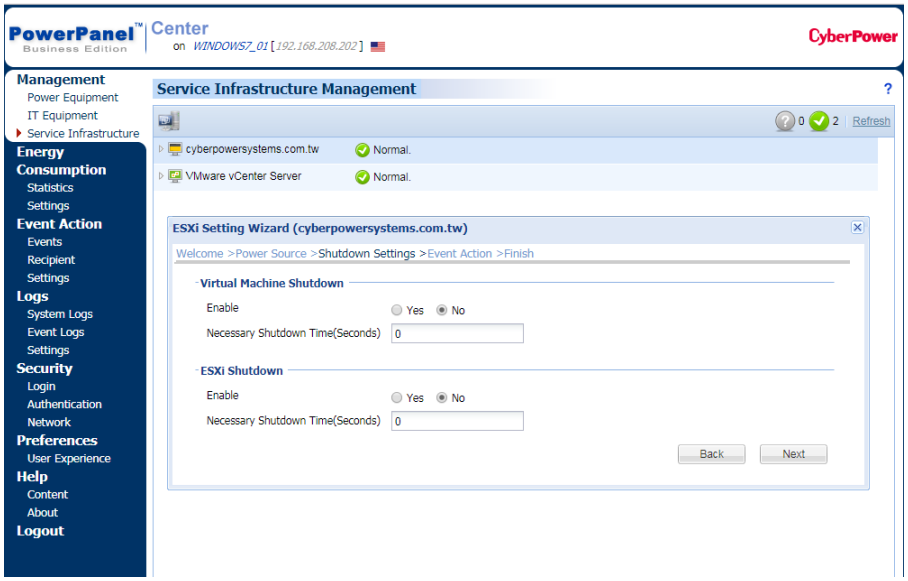
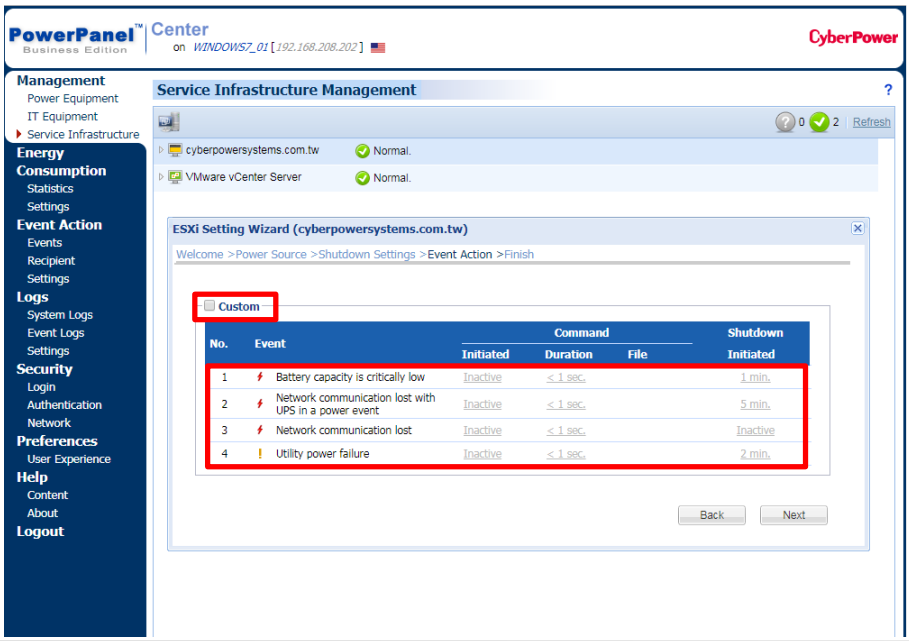
2. CONFIGURATION 4

6-4. Next, select if the virtual machine and/or ESXi host will be shutdown, and the respective amount of time needed for each to complete a graceful shutdown. Click "Next" to continue. .



6-5. The next step is to assign the shutdown behavior. Check “Custom” and select the power event and graceful shutdown condition of ESXi server. Click “Next” when the setting is done.

Note: *If you skip this step and do not assign shutdown behavior, this ESXi server will follow the shutdown behavior assigned in PPBE Center (refer to step 8).*



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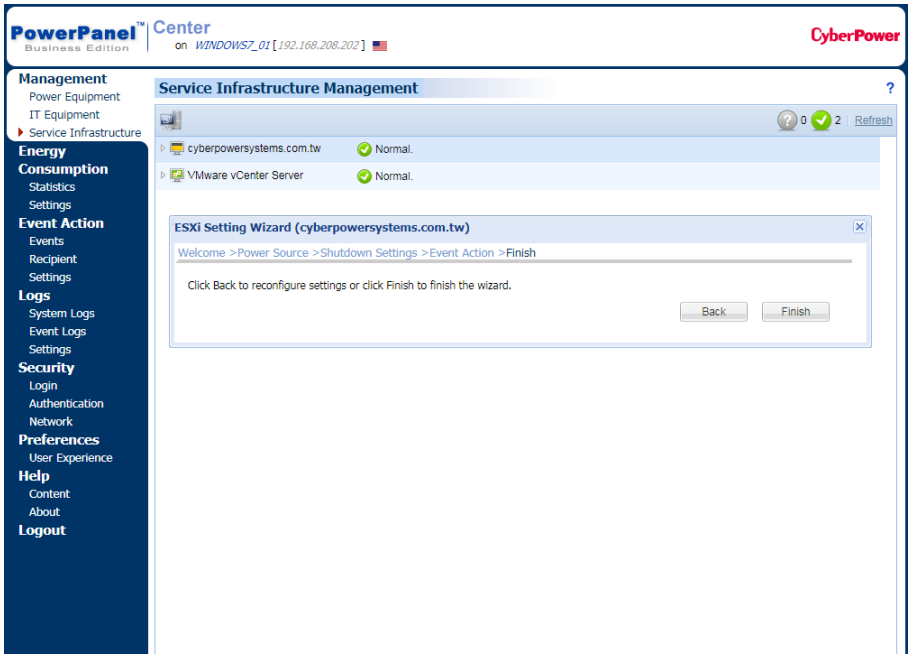
2. CONFIGURATION 4

6-6. After all setting details are checked and confirmed correct. Click “Finish” to complete the configuration of ESXi server.



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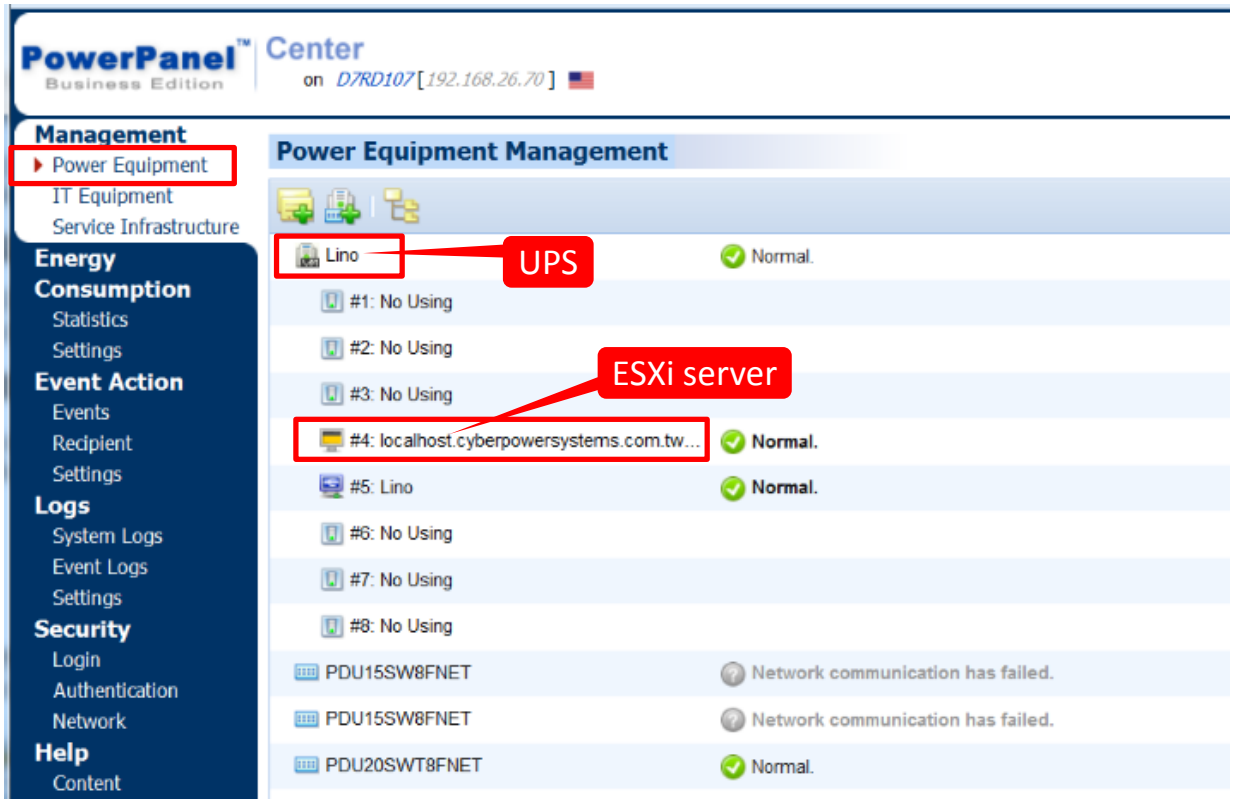
2. CONFIGURATION 4

7. If the setting is done correctly, you will see the UPS as well as the ESXi servers connected to it in the "**Management → Power Equipment**" screen.



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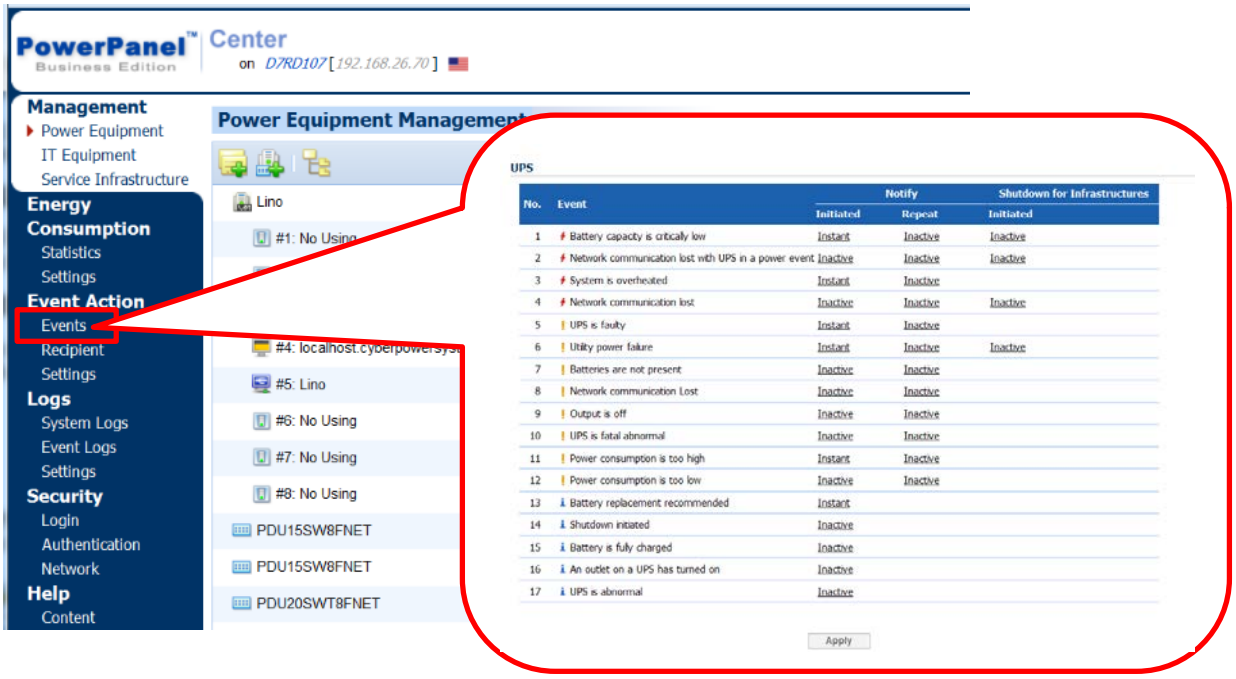
2. CONFIGURATION 4

8. You can define the “Event Action” details as a graceful shutdown template. All monitored ESXi servers which are not assigned individual shutdown behavior in step 6-2 will be shutdown according to these settings (without having to install PPBE on each ESXi server).



Note: *We recommend using PPBE Center “Event Action” template for graceful shutdown of all monitored ESXi servers because it convenient and does not need PPBE Client installed on any ESXi server.*

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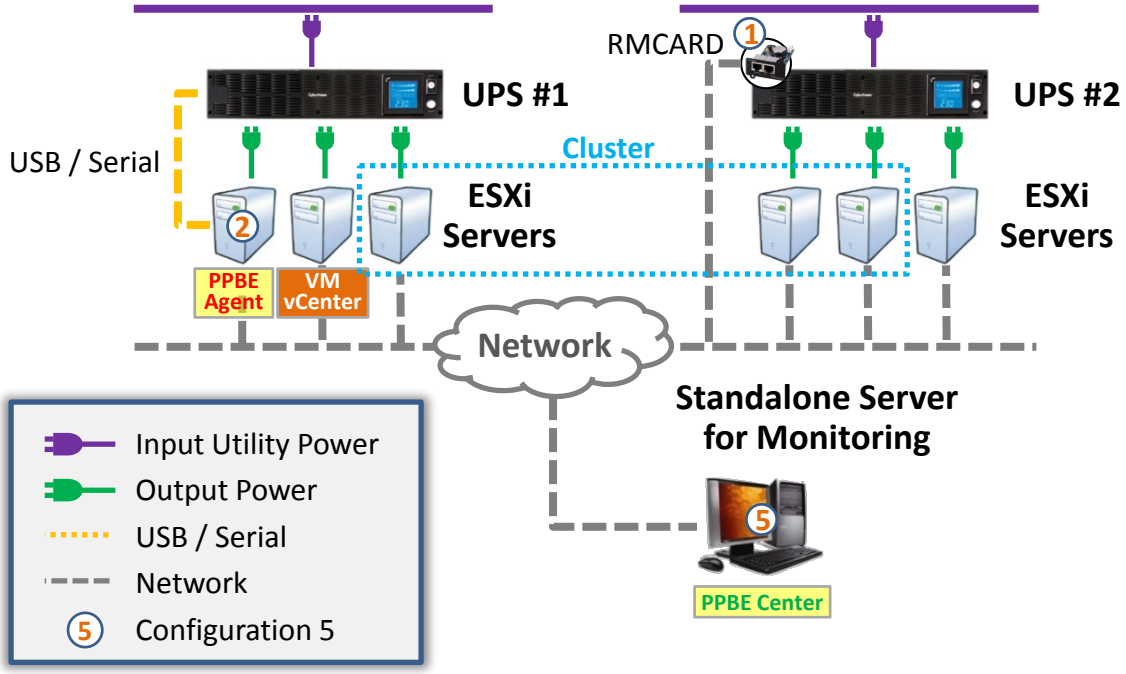
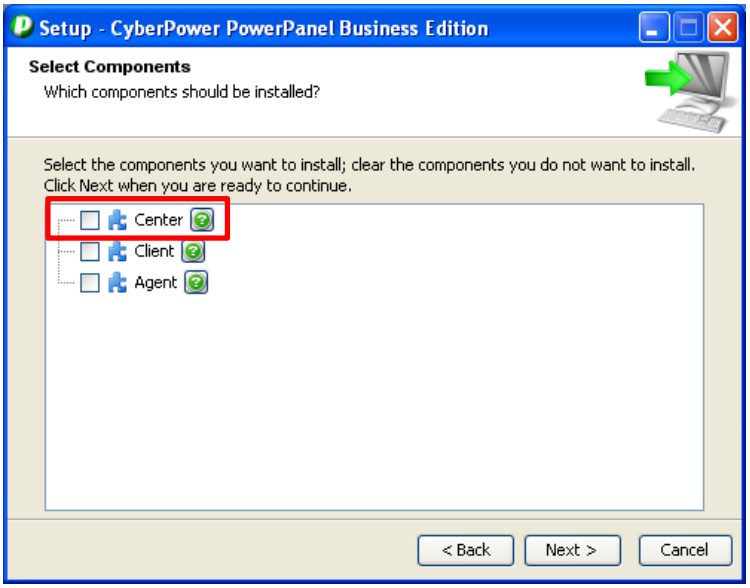
2. CONFIGURATION 5

Install PPBE Center with the presence of VMware vCenter



1. Download the latest version of **PPBE** from CyberPower official website.
2. When prompted in the installation wizard, select **Center**.


Setup - CyberPower PowerPanel Business Edition
Select Components
Which components should be installed?
Select the components you want to install; clear the components you do not want to install.
Click Next when you are ready to continue.
Center
Client
Agent
< Back
Next >
Cancel

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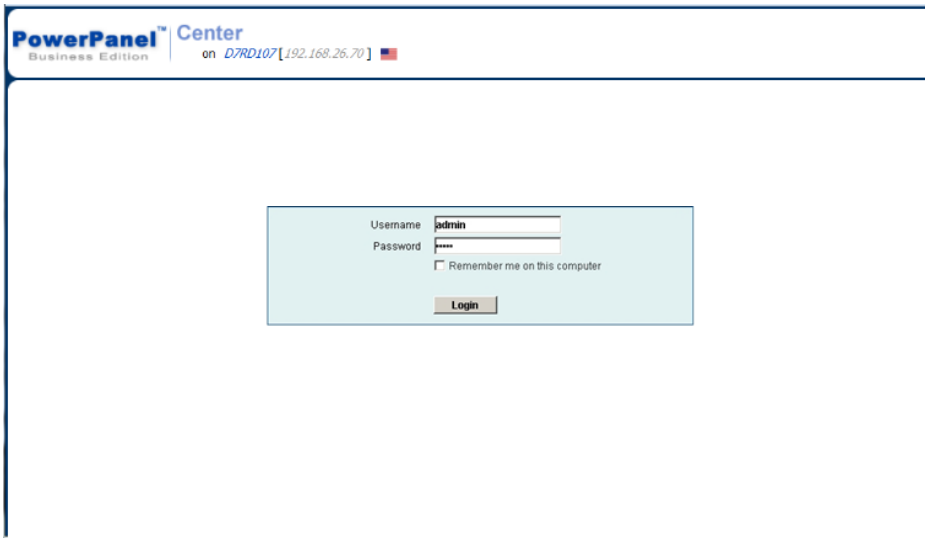
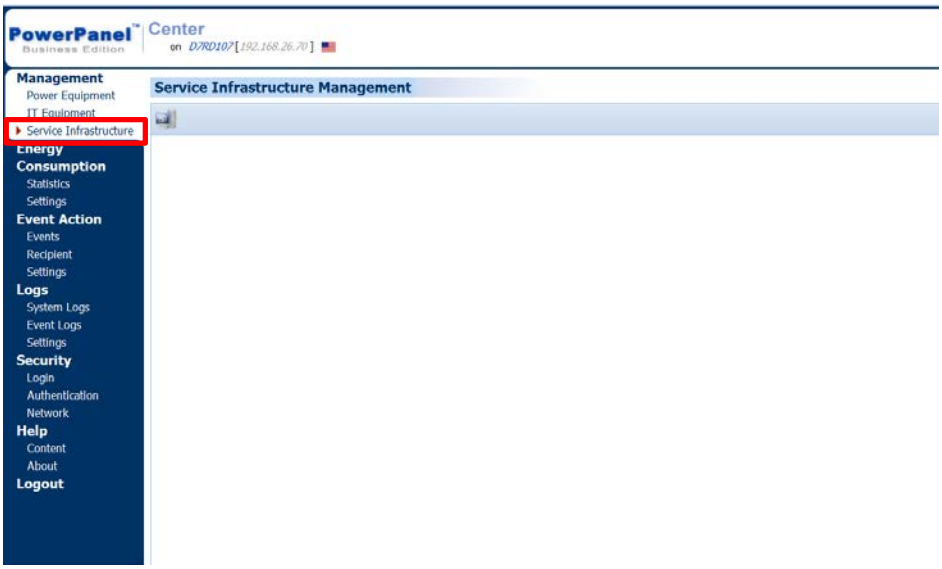
2. CONFIGURATION 5

3. Log into PPBE Center through any supported web browser.

Go to http://xxx.xxx.xxx.xxx:3052 where xxx.xxx.xxx.xxx is the IP address of the center computer, and login with the default Username/Password: admin/admin.



4. After login, go to **Service Infrastructure** in PPBE Center and prepare to add a new vCenter server.



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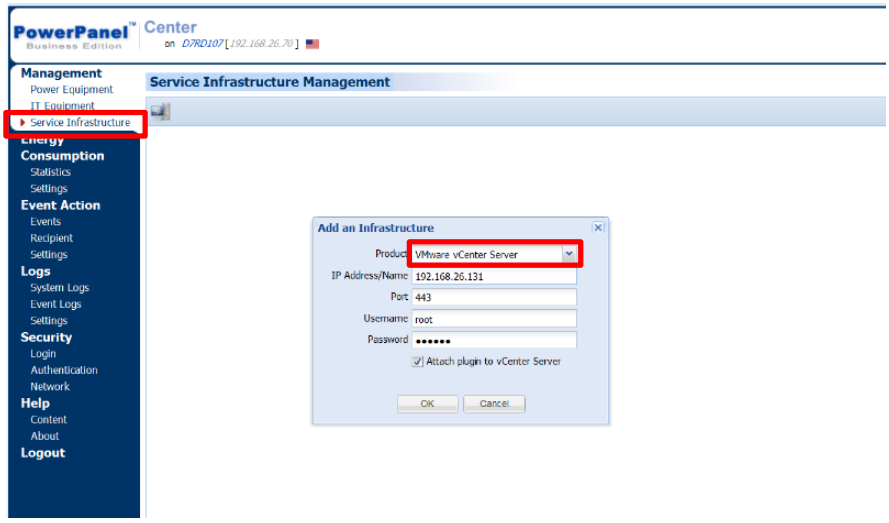
2. CONFIGURATION 5

5. To add a new vCenter server in PPBE, click on the **Add Infrastructure** icon.

> ***Note:*** *Before you add ESXi server, you must add all UPSs first on the "Power Equipment" page. Please refer to PPBE user's manual in the section "**Using PPBE Center → Device Management**".*

Select **VMware vCenter Server** from the drop-down list of **Product** item and enter related information including username and password of the ESXi server.



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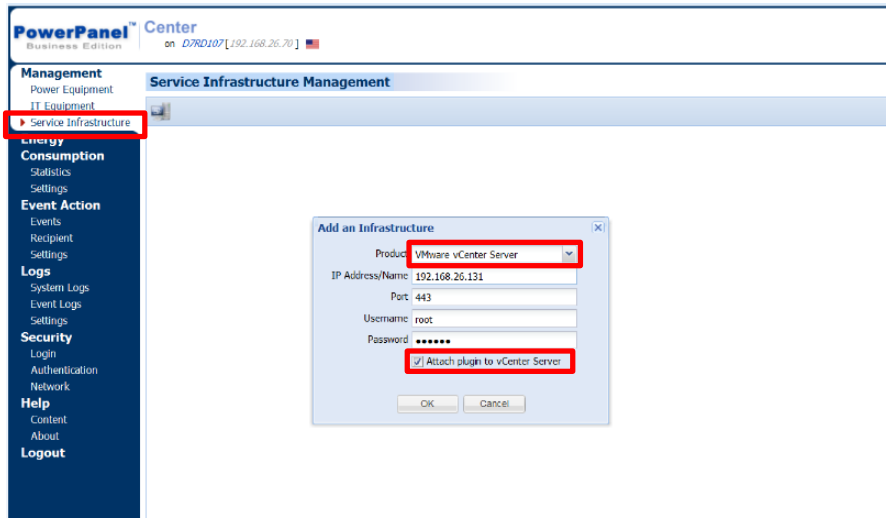
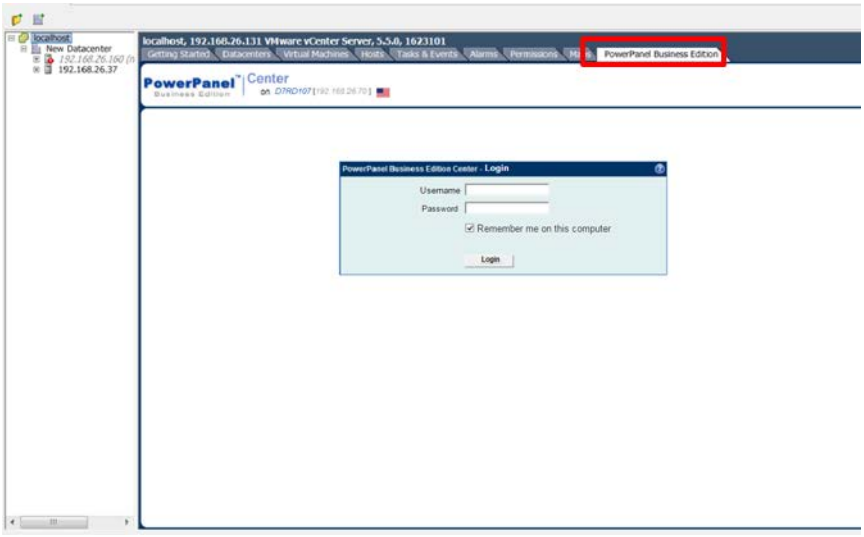
2. CONFIGURATION 5

6. Leaving the “Attach plugin to vCenter Server” option checked is recommended.



6-1. If the “Attach plugin to vCenter Server” option is checked, it will add the PPBE Center plugin to VMware vCenter interface.



Note: *If you use **vSphere Web Client,** this feature will NOT be available because currently PPBE does not support attached plugin on vSphere Web Client.*

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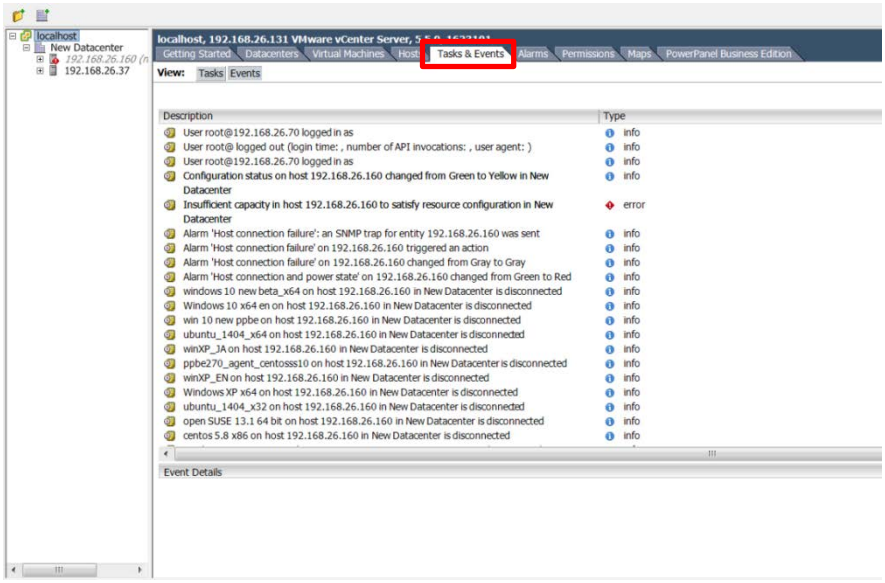
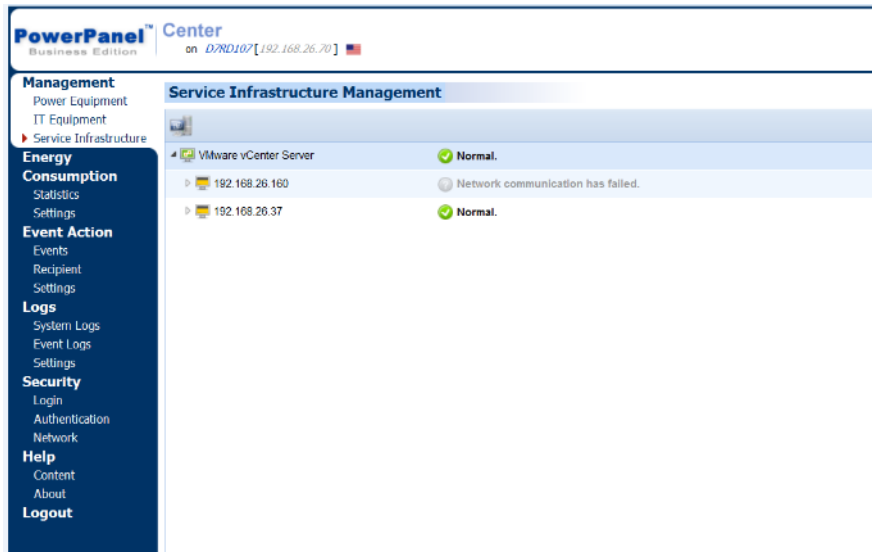
2. CONFIGURATION 5

6-2. Whether the “Attach plugin to vCenter Server” is checked or not, PPBE Center will write its event logs to the **Tasks & Events** tab in VMware vCenter interface.


localhost
New Datacenter
192.168.26.37
localhost, 192.168.26.131 VMware vCenter Server,
Getting Started
Datacenters
Virtual Machines
Hosts
Tasks & Events
Alarms
Permissions
Maps
PowerPanel Business Edition
View:
Tasks
Events
Description
Type
User root@192.168.26.70 logged in as
User root@ logged out (login time: , number of API invocations: , user agent:)
Configuration status on host 192.168.26.160 changed from Green to Yellow in New Datacenter
Insufficient capacity in host 192.168.26.160 to satisfy resource configuration in New Datacenter
Alarm 'Host connection failure': an SNMP trap for entity 192.168.26.160 was sent
Alarm 'Host connection failure' on 192.168.26.160 triggered an action
Alarm 'Host connection failure' on 192.168.26.160 changed from Gray to Gray
Alarm 'Host connection and power state' on 192.168.26.160 changed from Green to Red
windows 10 new beta_x64 on host 192.168.26.160 in New Datacenter is disconnected
Windows 10 x64 en on host 192.168.26.160 in New Datacenter is disconnected
win 10 new ppbe on host 192.168.26.160 in New Datacenter is disconnected
ubuntu_1404_x64 on host 192.168.26.160 in New Datacenter is disconnected
winXP_JA on host 192.168.26.160 in New Datacenter is disconnected
ppbe270_agent_centosss10 on host 192.168.26.160 in New Datacenter is disconnected
winXP_EN on host 192.168.26.160 in New Datacenter is disconnected
Windows XP x64 on host 192.168.26.160 in New Datacenter is disconnected
ubuntu_1404_x32 on host 192.168.26.160 in New Datacenter is disconnected
open SUSE 13.1 64 bit on host 192.168.26.160 in New Datacenter is disconnected
centos 5.8 x86 on host 192.168.26.160 in New Datacenter is disconnected
info
error
Event Details

7. If the configuration is successful, the icon of the new VMware vCenter server will be displayed, as well as all ESXi servers which are currently monitored by vCenter.



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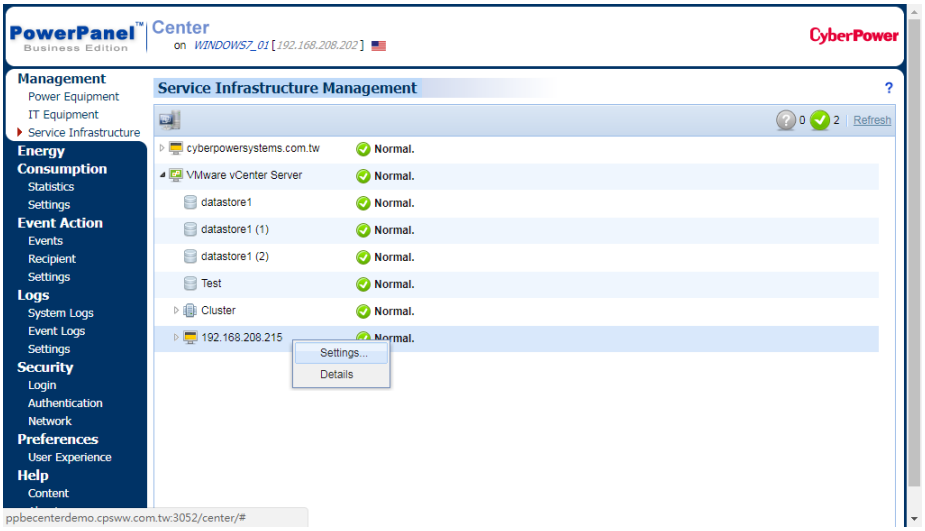
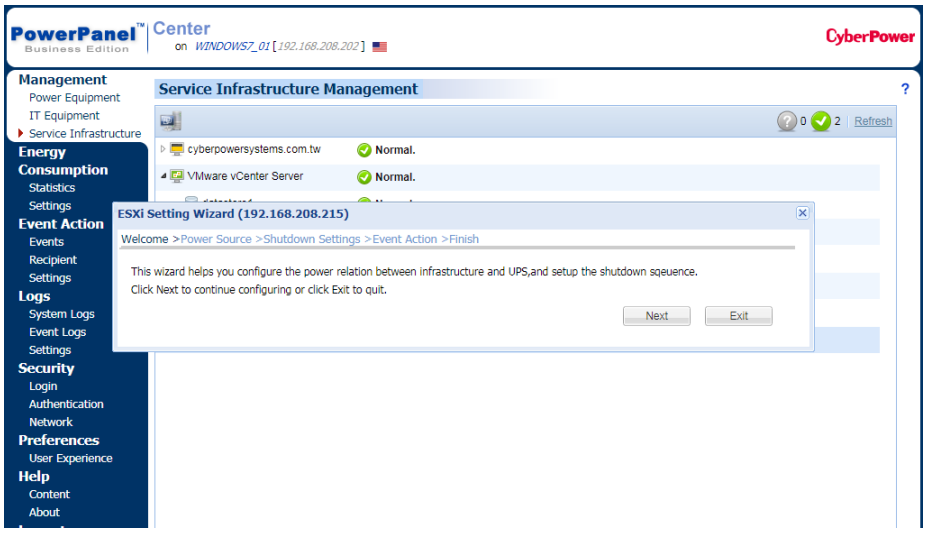
2. CONFIGURATION 5

8. To configure ESXi hosts under VMware vCenter:
Correctly set the power source (UPS) of all added ESXi hosts. To do this click the device icons (ESXi hosts) and select ”**Settings**”.



8-1. The “ESXi Setting Wizard” will appear. Please click “Next” to continue.



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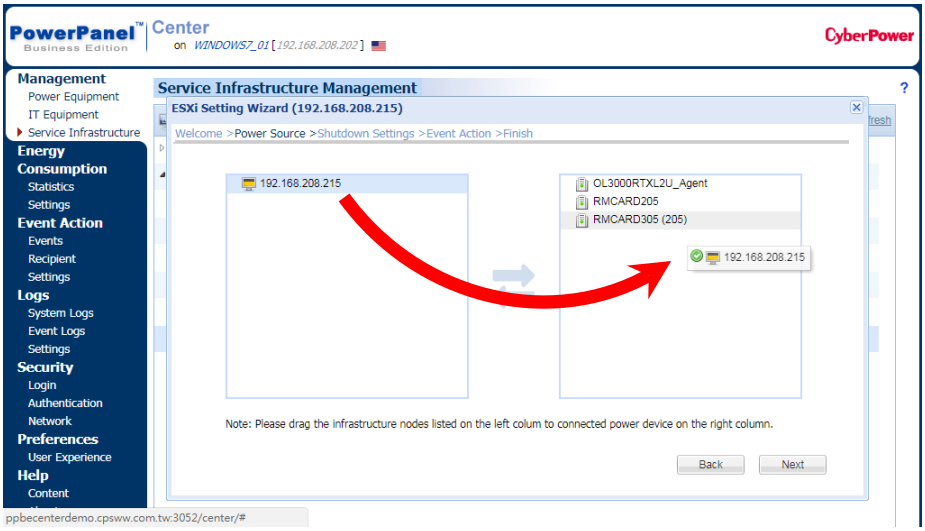
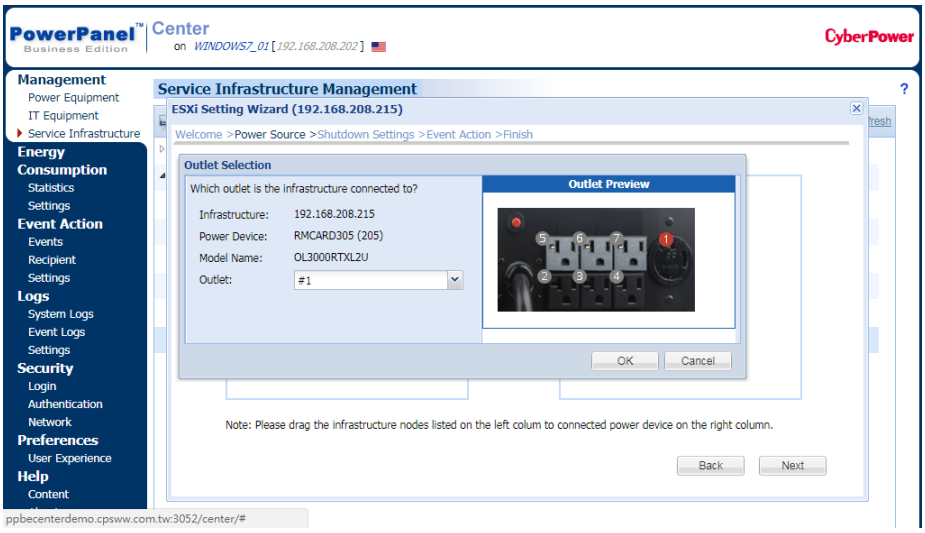
2. CONFIGURATION 5

8-2. Assign the power source (UPS) of the ESXi server in the left column by dragging and dropping it below the correct UPS in the right column.



8-3. In the “Outlet Selection” step, assign the correct UPS outlet used by ESXi server and click “OK”. Then click “Next” to continue.



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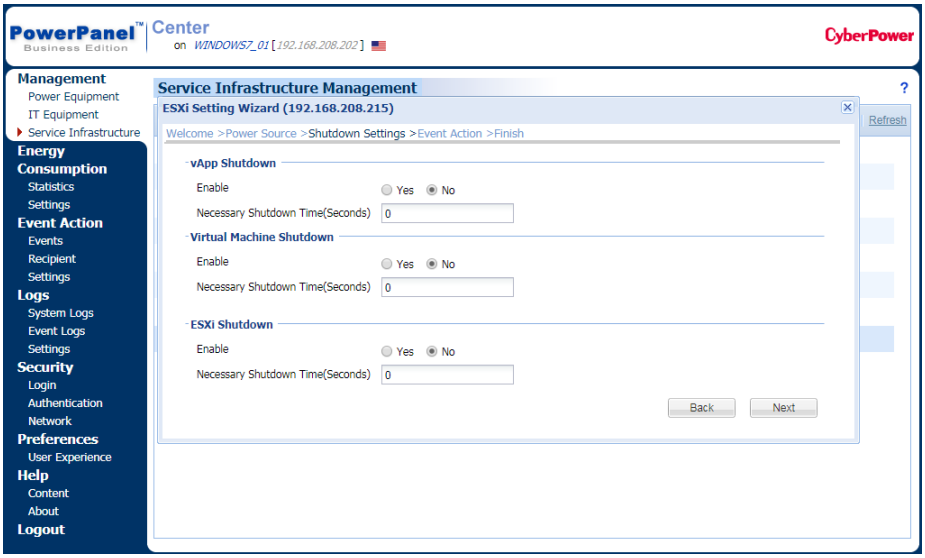
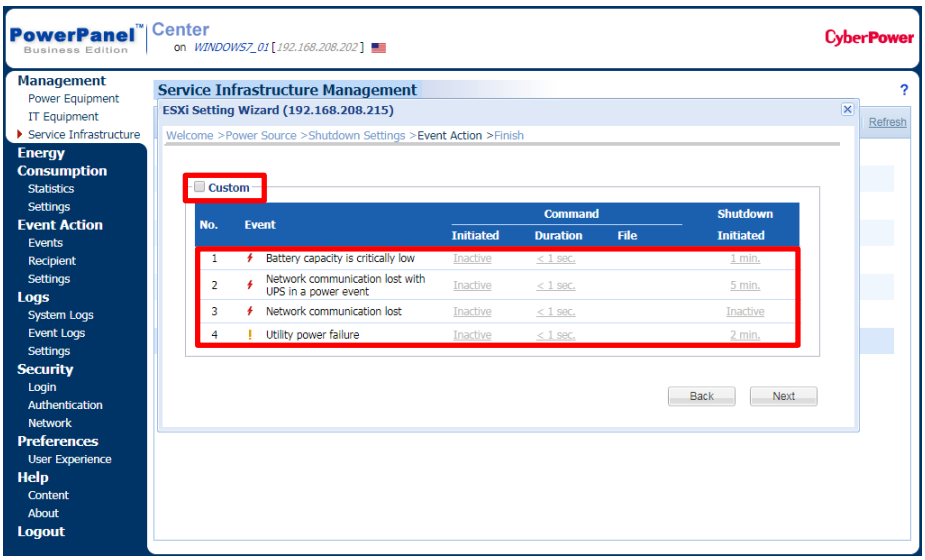
2. CONFIGURATION 5

8-4. Next, select if you want vApp, virtual machine, and/or ESXi host to shutdown, and the respective amount of time needed for each to complete a graceful shutdown. Click "Next" to continue.



8-5. The next step is to assign the shutdown behavior. Check “Custom” and select the power event and graceful shutdown condition of ESXi server. Click “Next” when the setting is done.



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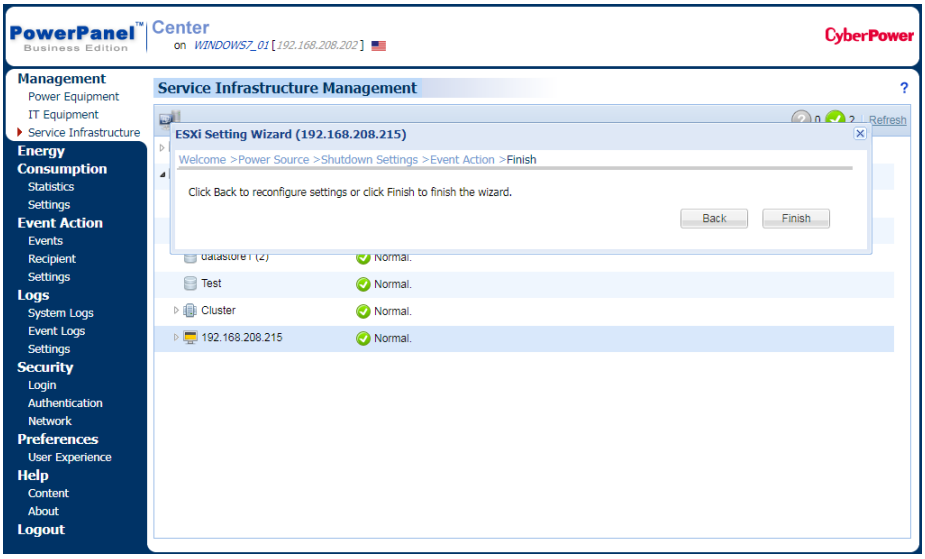
2. CONFIGURATION 5

8-6. After all setting details are checked and confirmed. Click “Finish” to complete the configuration of ESXi server.



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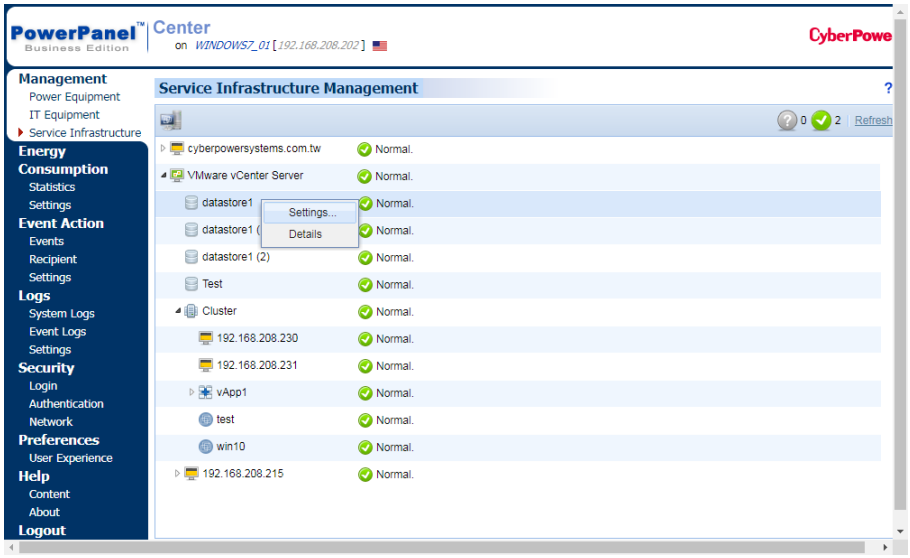
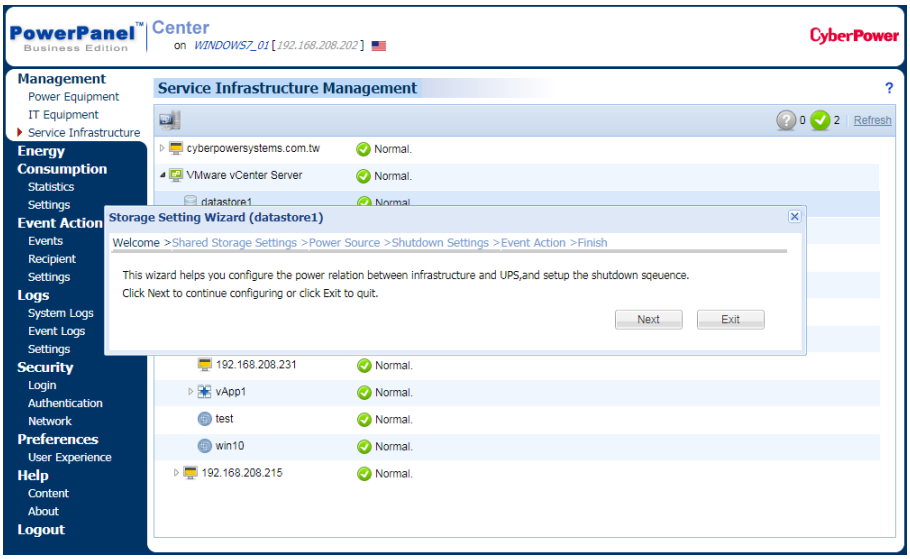
9. To configure shared storage within VMware vCenter:
Correctly set the power source (UPS) of all shared data storage, click the device icons (datastore) and select ”**Settings**”.



9-1. The “Storage Setting Wizard” will appear. Please click “Next” to continue.



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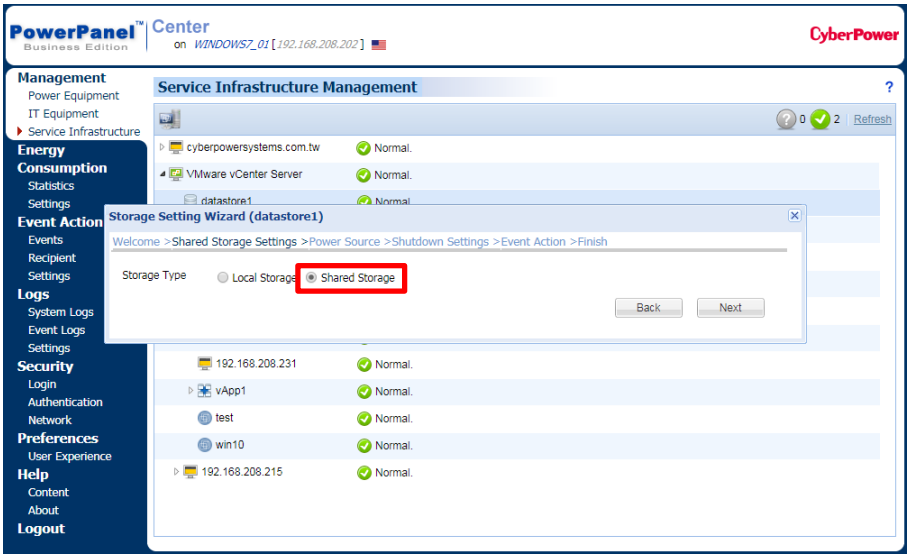
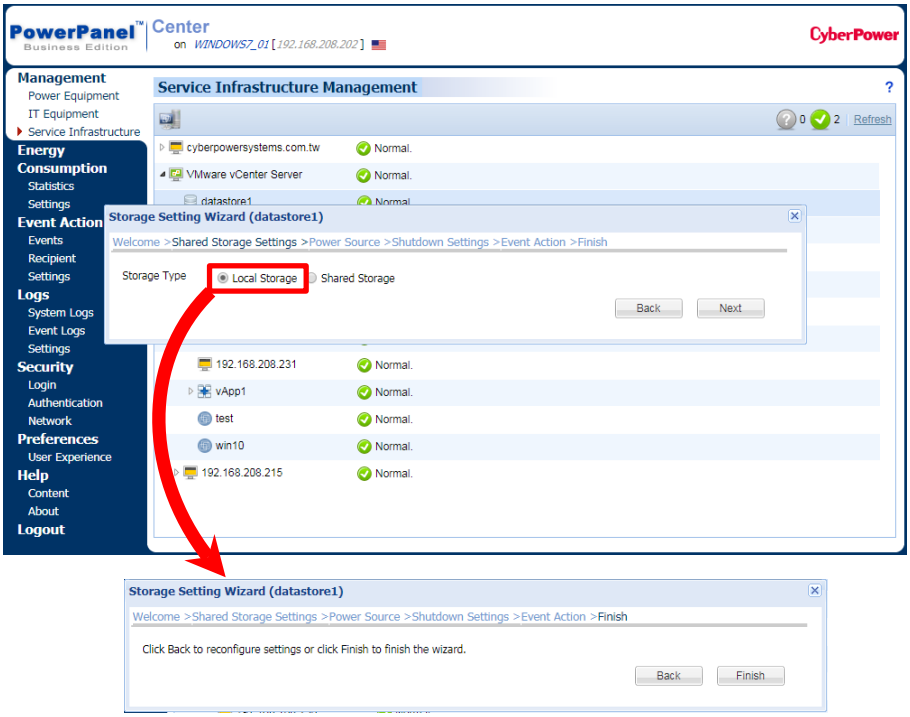
2. CONFIGURATION 5

9-2. In “Storage Type”, please check “Shared Storage” if the storage is a shared storage and has a UPS power source. Click “Next” to continue.



9-3. If you check “Local Storage”, the setting wizard will end and because a local storage is not powered by a separate UPS.



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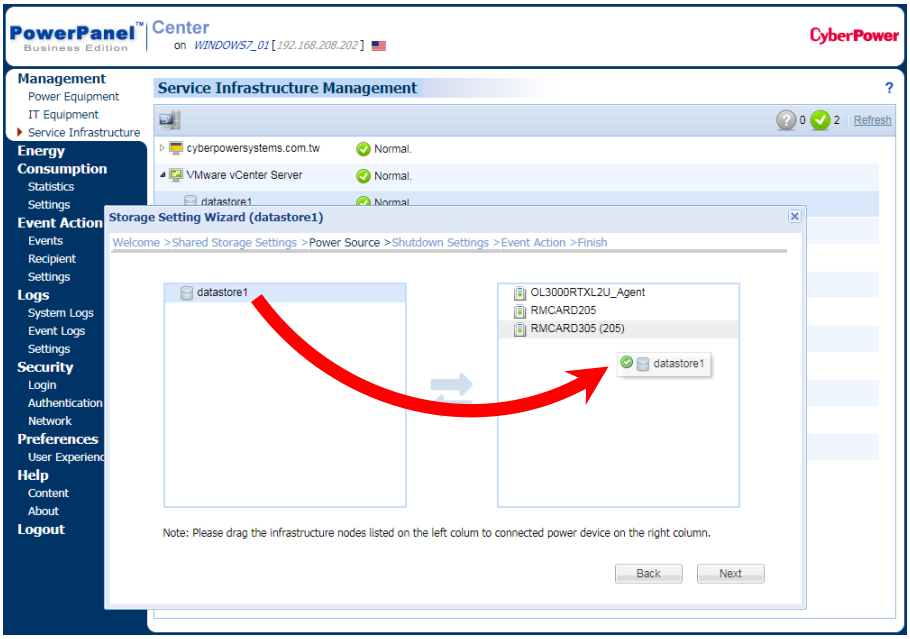
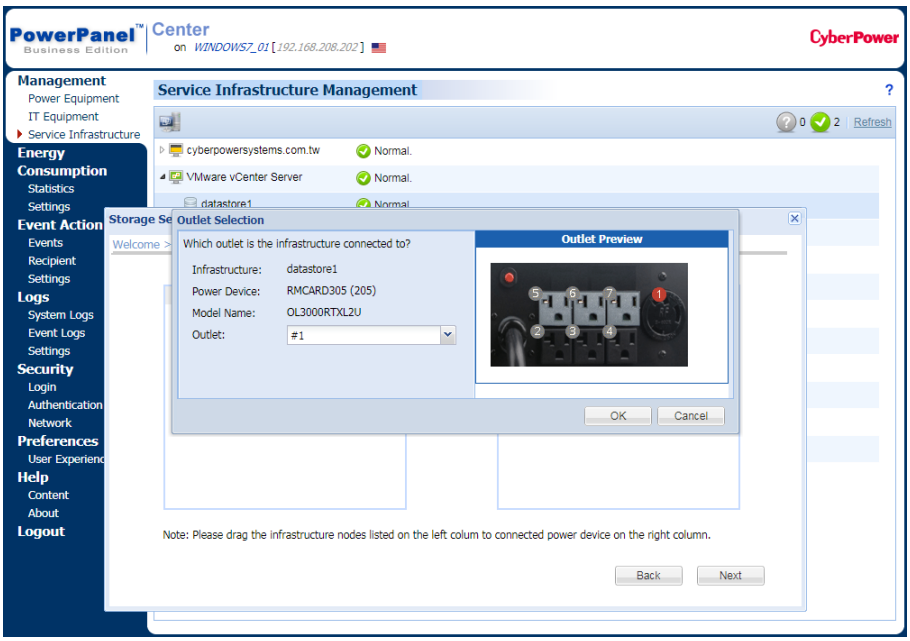
2. CONFIGURATION 5

9-4. Assign the power source (UPS) of the ESXi server in the left column by dragging and dropping it below the correct UPS in the right column.



9-5. In the “Outlet Selection” screen, assign the correct UPS outlet used by shared storage and click “OK”. Then click “Next” to continue.



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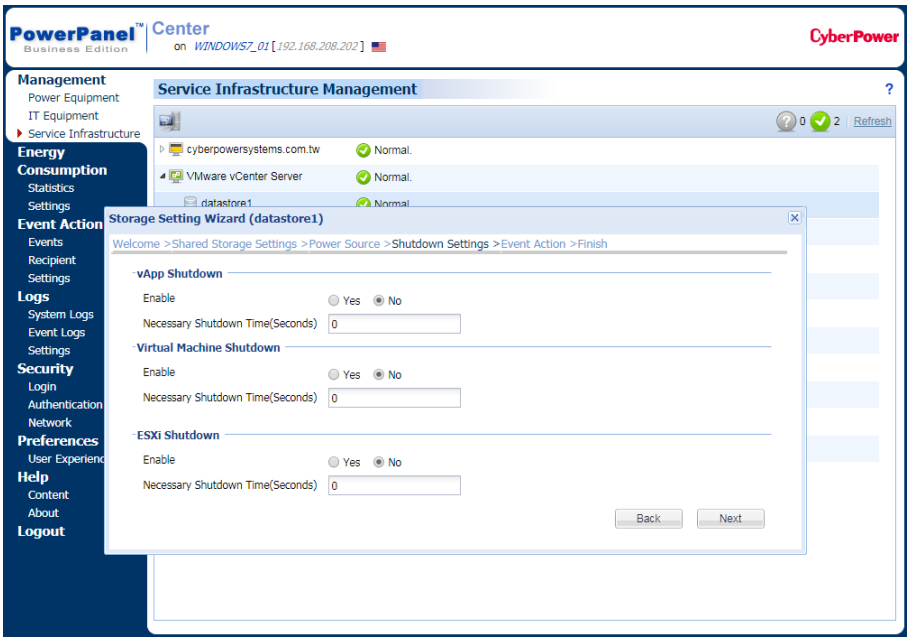
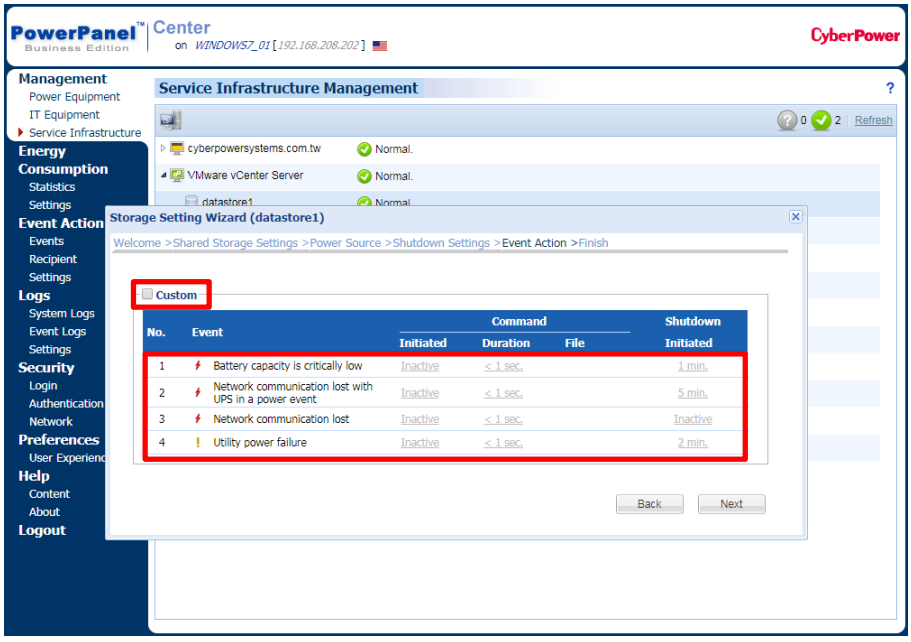
2. CONFIGURATION 5

9-6. After clicking “Next”, the shutdown settings will appear. Select if you want vApp, virtual machine, and/or ESXi host to shutdown, and the respective amount of time needed for each to complete a graceful shutdown. Click "Next" to continue.



9-7. The next step is to assign the shutdown behavior. Check “Custom” and select the power event and graceful shutdown condition of shared storage. Click “Next” to continue.



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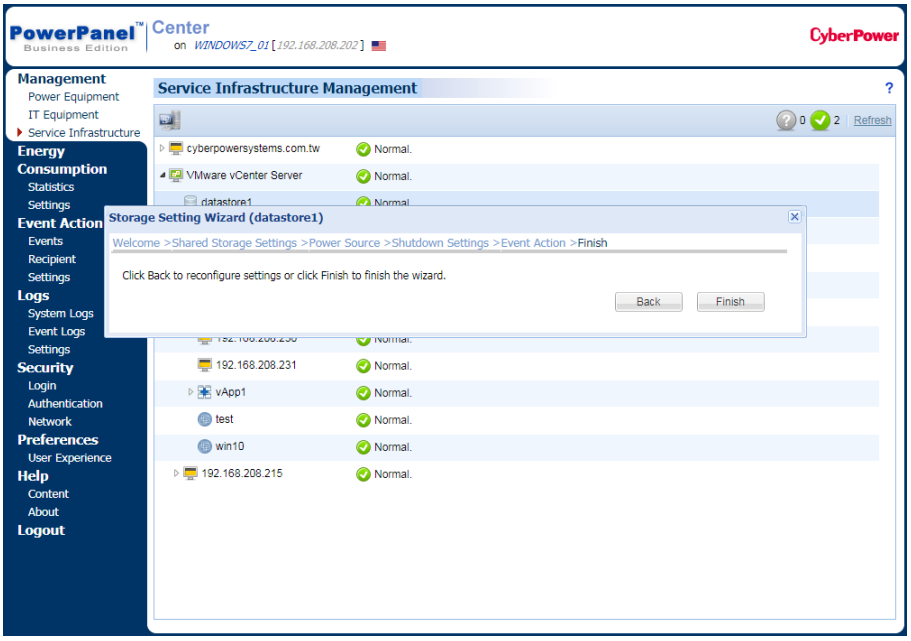
2. CONFIGURATION 5

9-8. After all setting details are checked and confirmed. Click “Finish” to complete the configuration of shared storage.



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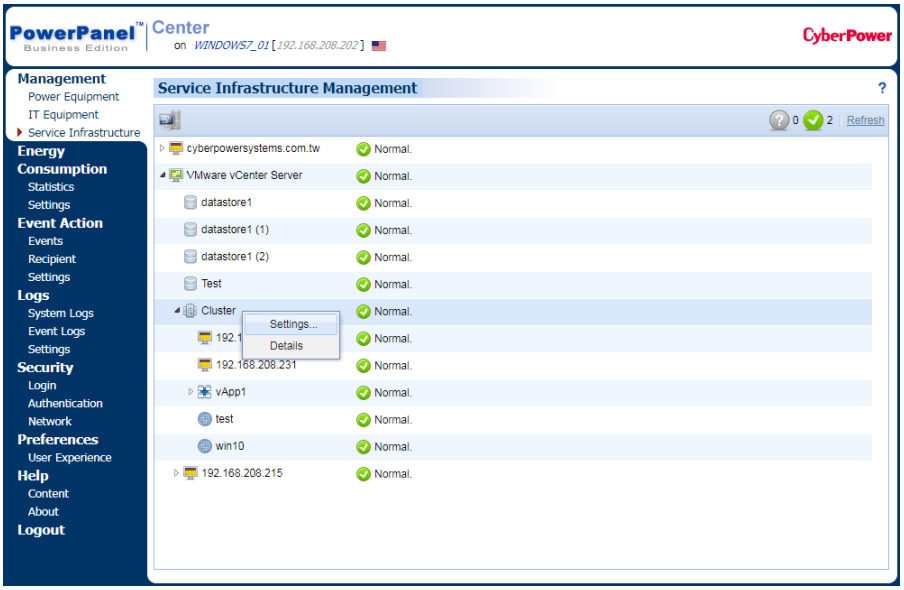
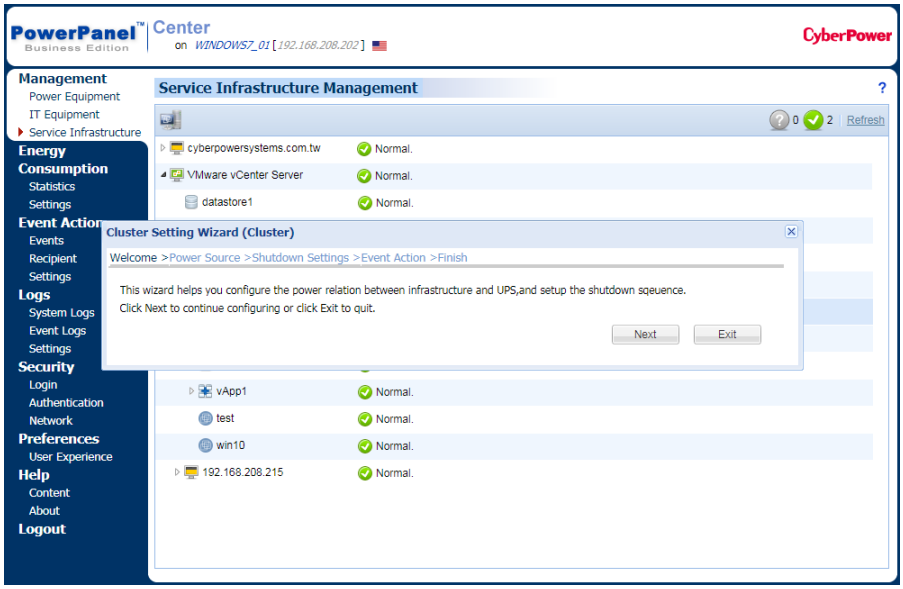
10. To configure a cluster within VMware vCenter:

To correctly set the power source (UPS) of cluster, click the device icons (Cluster) and select ”**Settings**”.



10-1. The “Cluster Setting Wizard” will appear. Please click “Next” to continue.


PowerPanel Business Edition Center
on WINDOWS7_01 [192.168.208.202]
CyberPower
Service Infrastructure Management
Refresh
Cluster Setting Wizard (Cluster)
Welcome >Power Source >Shutdown Settings >Event Action >Finish
This wizard helps you configure the power relation between infrastructure and UPS,and setup the shutdown sqeuence.
Click Next to continue configuring or click Exit to quit.
Next
Exit
Normal.

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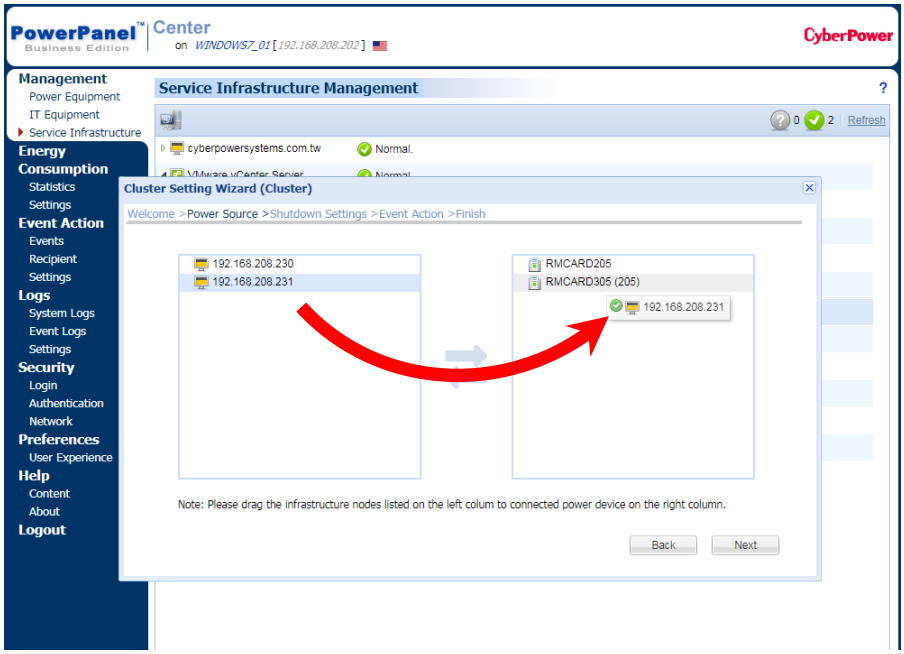
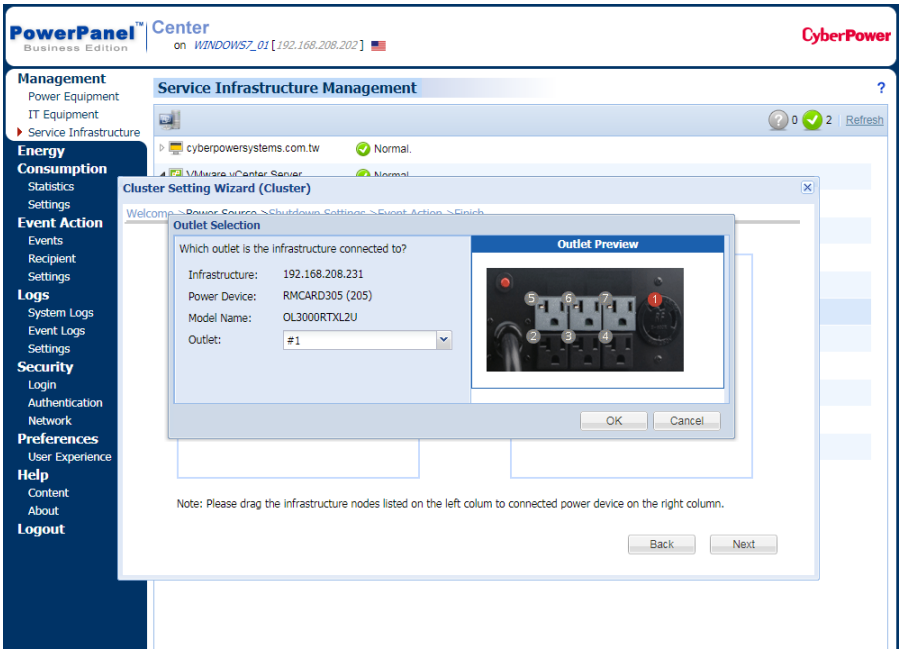
2. CONFIGURATION 5

10-2. Assign the power source (UPS) of each ESXi host in the cluster (in the left column), one by one, by dragging and dropping it below the correct UPS in the right column.



10-3. In the “Outlet Selection” screen, assign the correct UPS outlet used by cluster and click “OK”. Then click “Next” to continue.



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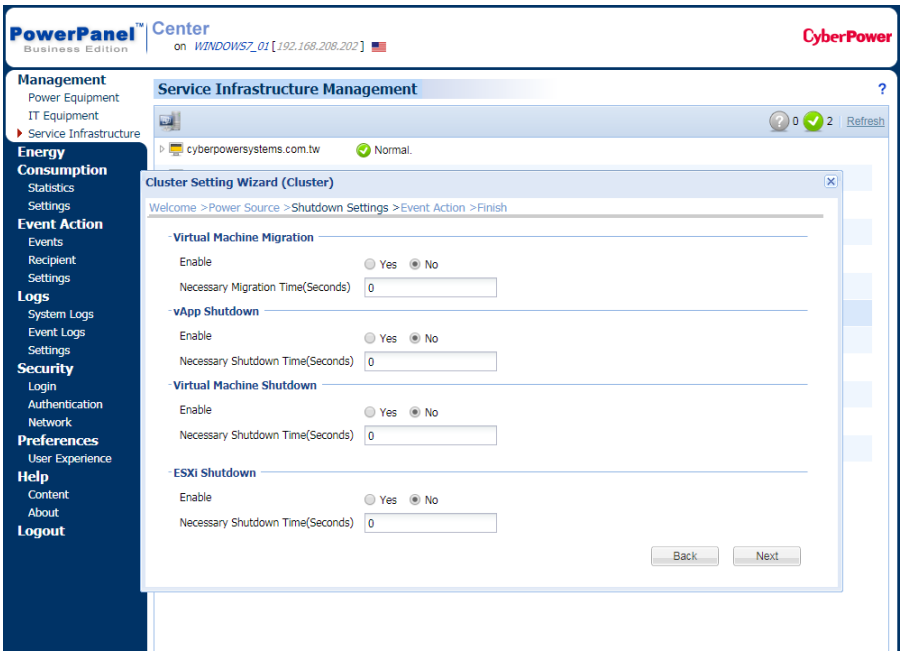
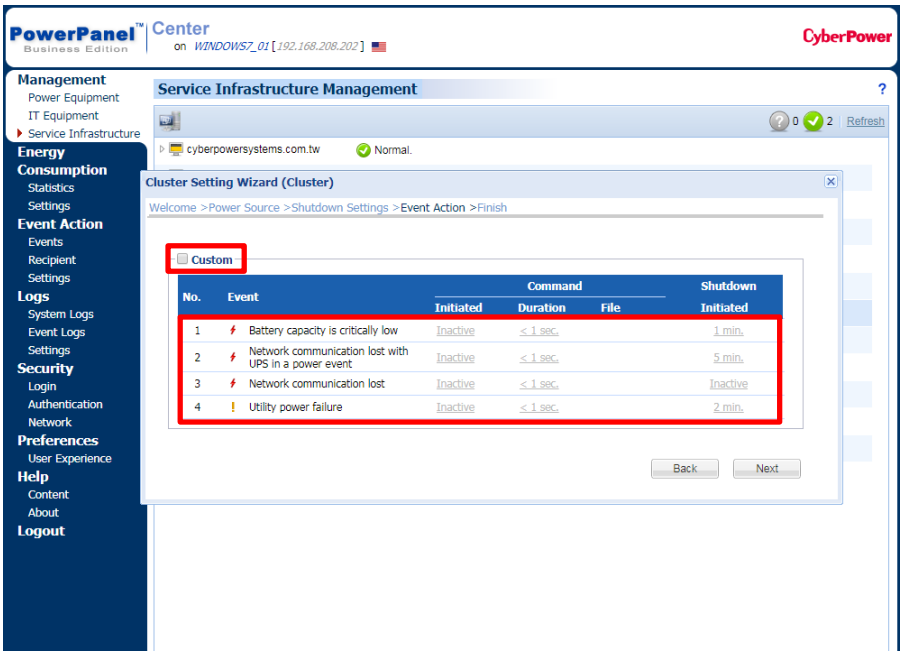
2. CONFIGURATION 5

10-4. After clicking “Next”, the shutdown settings will appear. In addition to selecting virtual machine migration (vMotion), select if you want vApp, virtual machine, and/or ESXi host to shutdown, and the respective amount of time needed for each to complete. Click "Next" to continue.



10-5. The next step is to assign the shutdown behavior. Check “Custom” and select the power event and graceful shutdown condition of cluster. Click “Next” when the setting is done.



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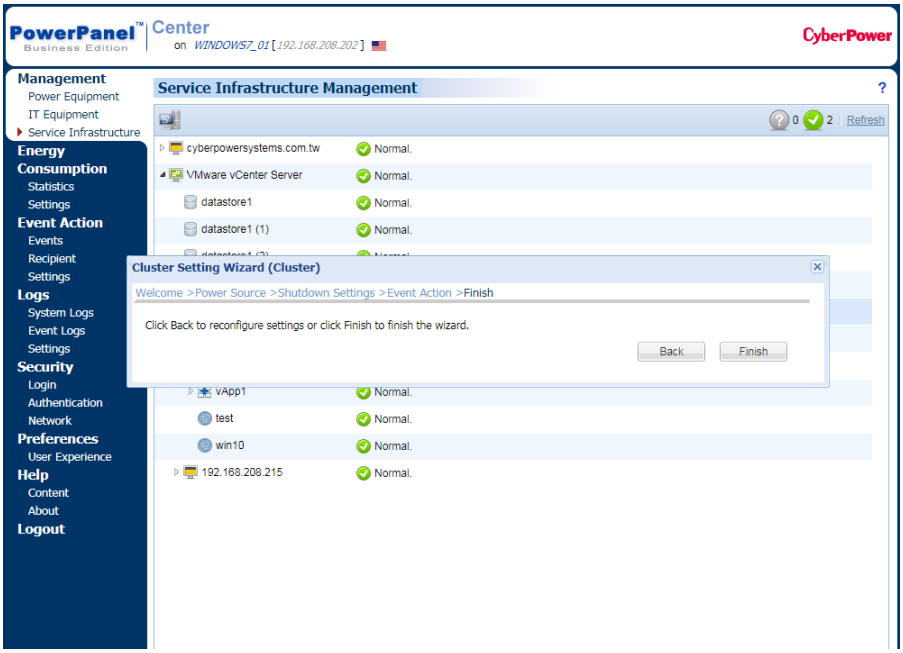
2. CONFIGURATION 5

10-6. After all setting details are checked and confirmed. Click “Finish” to complete the configuration of cluster.



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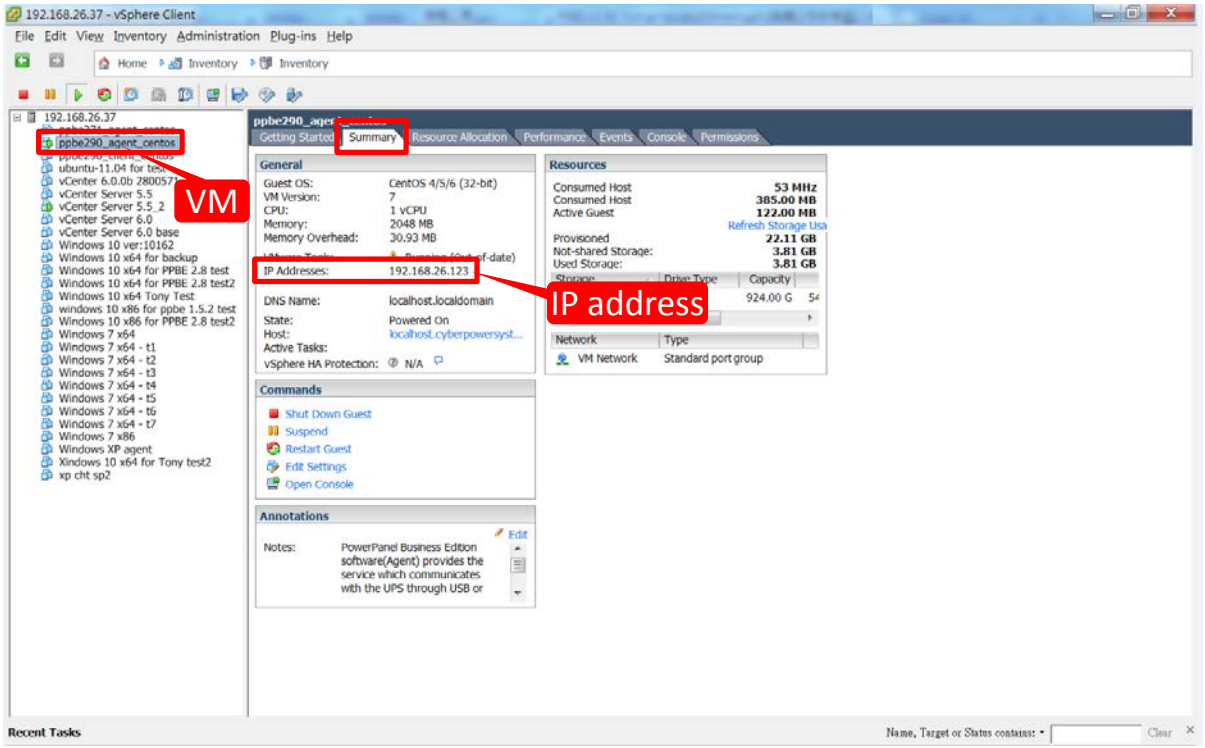
3. APPENDIX

How to Find VM's IP address?

You can find the VM's IP address in vSphere Client interface: **Summary** → **General** → **IP Addresses**.



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